

MHI  
Copy 3

# FM17-35

DEPARTMENT OF THE ARMY FIELD MANUAL

---

## ARMORED CAVALRY PLATOON, TROOP AND SQUADRON



HEADQUARTERS, DEPARTMENT OF THE ARMY  
FEBRUARY 1960

FIELD MANUAL

No. 17-35

HEADQUARTERS,  
DEPARTMENT OF THE ARMY  
WASHINGTON 25, D. C., 11 February 1960

## ARMORED CAVALRY PLATOON, TROOP, AND SQUADRON

	Paragraphs	Page
<b>PART ONE. GENERAL</b>		
<b>CHAPTER 1. GENERAL</b> .....	1-4	5
2. EMPLOYMENT OF ARMORED CAVALRY UNITS.	5-9	9
<b>PART TWO. SCOUT PLATOON, ARMOR AND ARMORED INFANTRY BATTALIONS, AND SCOUT SECTION, COMBAT COMMAND</b>		
<b>CHAPTER 3. SCOUT PLATOON, ARMOR AND ARMORED INFANTRY BATTALIONS</b>		
Section I. General .....	10, 11	10
II. Scout platoon organization .....	12-15	11
III. Duties of key personnel .....	16-19	13
IV. Combat operations of scout platoon, general ..	20-29	14
V. Employment of medium range ground radar ..	30-32	25
VI. Scout platoon, reconnaissance missions .....	33-36	26
VII. Scout platoon, security missions .....	37-41	30
VIII. Scout platoon in offensive operations .....	42-44	34
IX. Scout platoon in defensive operations .....	45-49	36
X. Scout platoon in retrograde operations .....	50-52	40
XI. Scout platoon, additional missions .....	53-57	42
XII. Scout platoon, special operations .....	58-61	43
<b>CHAPTER 4. SCOUT SECTION, COMBAT COMMAND HEADQUARTERS AND HEADQUAR- TERS COMPANY</b>		
Section I. General .....	62, 63	45
II. Scout section organization .....	64-66	45
III. Employment of the scout section .....	67-72	47

\* This manual supersedes FM 17-35, 26 December 1957.

	Paragraphs	Page
<b>PART THREE. ARMORED CAVALRY PLATOON</b>		
<b>CHAPTER 5. GENERAL</b>		
Section I. General.....	73, 74	49
II. Armored cavalry platoon organization.....	75-80	49
III. Duties of key personnel.....	81-85	51
IV. Employment, general.....	86-90	52
<b>CHAPTER 6. RECONNAISSANCE AND SECURITY MISSIONS, ARMORED CAVALRY PLATOON</b>		
Section I. Platoon in reconnaissance missions.....	91-97	54
II. Platoon in security missions.....	98-103	62
<b>CHAPTER 7. OFFENSIVE OPERATIONS, ARMORED CAVALRY PLATOON.</b>	104-119	66
8. DEFENSIVE OPERATIONS, ARMORED CAVALRY PLATOON.	120-127	73
9. DELAYING ACTIONS, ARMORED CAVALRY PLATOON.	128-138	81
<b>PART FOUR. ARMORED CAVALRY TROOP</b>		
<b>CHAPTER 10. GENERAL</b>		
Section I. General.....	139, 140	88
II. Armored cavalry troop organization.....	141-143	89
III. Duties of key personnel.....	144-150	91
IV. Employment, general.....	151, 152	92
V. Employment of short range ground radar.....	153-155	93
VI. Organization for combat, armored cavalry troop.	156-160	94
<b>CHAPTER 11. RECONNAISSANCE OPERATIONS, ARMORED CAVALRY TROOP.</b>	161-166	98
12. SECURITY OPERATIONS, ARMORED CAVALRY TROOP		
Section I. General.....	167	106
II. Advance guard.....	168-170	106
III. Flank guard.....	171-174	108
IV. Rear guard.....	175-177	113
V. Covering force.....	178, 179	116
VI. Screening force.....	180-182	117
VII. Rear area security.....	183	120
<b>CHAPTER 13. OFFENSIVE OPERATIONS, ARMORED CAVALRY TROOP</b>		
Section I. General.....	184	124
II. Preparation for the attack.....	185-195	124
III. Conduct of the attack.....	196-204	131

	Paragraphs	Page
CHAPTER 14. DEFENSIVE OPERATIONS, ARMORED CAVALRY TROOP.	205-214	135
15. RETROGRADE OPERATIONS, ARMORED CAVALRY TROOP		
Section I. Delaying action .....	215-225	146
II. Withdrawal from action .....	226-229	153
III. Retirement .....	230, 231	158
PART FIVE. ARMORED CAVALRY SQUADRON		
CHAPTER 16. GENERAL		
Section I. General .....	232-235	159
II. Armored division cavalry squadron organization.	236-246	160
III. Infantry division cavalry squadron organization.	247, 248	165
CHAPTER 17. EMPLOYMENT OF THE ARMORED CAVALRY SQUADRON		
Section I. General .....	249, 250	167
II. Organization for combat .....	251, 252	168
III. Combat support .....	253-258	169
IV. Employment, headquarters and headquarters troop.	259-265	171
CHAPTER 18. RECONNAISSANCE OPERATIONS, ARMORED CAVALRY SQUADRON		
Section I. General .....	266-268	176
II. Route, zone, and area reconnaissance .....	269-272	179
III. Conduct of reconnaissance operations .....	273-277	180
CHAPTER 19. SECURITY OPERATIONS, ARMORED CAVALRY SQUADRON		
Section I. General .....	278-280	183
II. Advance guard .....	281, 282	184
III. Flank guard .....	283, 284	185
IV. Rear guard .....	285, 286	187
V. Covering force .....	287, 288	187
VI. Screening force .....	289, 290	188
VII. Rear area security .....	291, 294	189
CHAPTER 20. OFFENSIVE OPERATIONS, ARMORED CAVALRY SQUADRON		
Section I. General .....	295-301	192
II. Preparation for attack .....	302-308	196
III. Conduct of attack .....	309-314	198
IV. Exploitation and pursuit .....	315-317	200



	Paragraphs	Page
<b>CHAPTER 21. DEFENSIVE OPERATIONS, ARMORED CAVALRY SQUADRON</b>		
Section I. General.....	318-325	204
II. Organization of defense.....	326-331	207
III. Mobile defense .....	332-335	210
IV. Position defense .....	336-339	212
V. Perimeter defense .....	340	214
<b>CHAPTER 22. RETROGRADE OPERATIONS, ARMORED CAVALRY SQUADRON</b>		
Section I. General.....	341-343	218
II. Delaying action .....	344-355	219
III. Withdrawal from action.....	356-359	225
IV. Retirement.....	360	226
<b>PART SIX. SPECIAL OPERATIONS AND COMMUNICATION</b>		
<b>CHAPTER 23. SPECIAL OPERATIONS, ARMORED CAVALRY UNITS</b>		
Section I. General.....	361	227
II. Chemical, biological, and radiological monitoring and survey.....	362-366	227
III. Damage control .....	367-369	229
IV. Reconnaissance behind enemy lines.....	370-375	231
V. Airmobile operations .....	376	234
<b>CHAPTER 24. COMMUNICATION SYSTEMS, ARMORED CAVALRY UNITS.</b>	377-388	235
<b>APPENDIX I. REFERENCES.....</b>		244
II. COMMANDER'S CHECKLISTS.....		247
III. EXAMPLES OF OPERATION ORDERS.....		254
<b>INDEX.....</b>		262

# PART ONE

## GENERAL

### CHAPTER 1

#### GENERAL

---

##### 1. Purpose

*a.* This manual covers the organization, doctrine, tactics, techniques, and procedures of the scout platoon and armored cavalry platoons, troops, and squadrons organic to both the armored division and the infantry division, and the armored cavalry platoon and armored cavalry troop of the armored cavalry regiment. For the purpose of this manual, the scout platoon is considered to be an armored cavalry type unit.

*b.* The material presented herein is intended as a guide. In practice, each situation must be solved by logical interpretation of the information in this manual or in other appropriate references.

*c.* This manual is designed to be used in conjunction with FM 17-1. General information contained in FM 17-1 is repeated in this manual only when necessary to ensure clarity and understanding. Other manuals which supplement the information in this manual and with which armored cavalry personnel should be familiar are listed in appendix I.

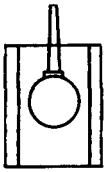
*d.* Unless otherwise specified, the material presented herein is applicable without modification to both nuclear and nonnuclear warfare.

*e.* Figure 1 shows the symbols most frequently used in illustrations throughout this manual. For other military symbols, see FM 21-30.

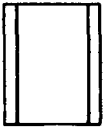
##### 2. Scope

This manual covers armored cavalry units from platoon to squadron level, except the armored cavalry squadron of the armored cavalry regiment. The manual is in five parts. Part one covers missions, capabilities, characteristics, and general information on the employment of armored cavalry units. Part two covers the organization and employment of the scout platoon organic to

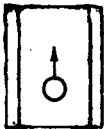
## LEGEND



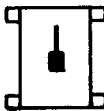
LIGHT-GUN TANK



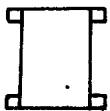
ARMORED PERSONNEL CARRIER



ARMORED PERSONNEL CARRIER USED BY THE  
SUPPORT SQUADS



¼-TON TRUCK WITH MOUNTED MACHINEGUN



¼-TON TRUCK



CONTACT POINT

NOTE: Illustrations used herein are not intended to depict  
future design of vehicles or equipment.

*Figure 1. Symbols used in manual.*

armor and armored infantry battalions and the scout section organic to the combat command headquarters and headquarters company. Part three covers the organization and employment of the armored cavalry platoon. Part four covers the organization and employment of the armored cavalry troop, and part five, the armored division cavalry squadron and infantry division cavalry squadron. Part six covers special operations and communication.

### 3. Missions of Armored Cavalry Units

Armored cavalry units are organized, equipped, and trained to perform reconnaissance, security, and economy of force missions. The employment of armored cavalry units on such missions permits the higher commander to concentrate the efforts of other elements of the command on more decisive objectives or on other aspects of the mission. Specifically, armored cavalry units are capable of performing the following missions:

- a. Conduct reconnaissance over wide fronts and to extended depths.
- b. Collect and report information of intelligence value, including information of potential nuclear targets and nuclear damage assessment.
- c. Provide flank security for a large unit.
- d. Provide security between elements of the parent organization or between the parent organization and an adjacent unit.
- e. The squadron can act as a covering force in offensive, defensive, or retrograde operations. Normally, suitable reinforcements are provided the squadron.
- f. Screen the parent organization.
- g. Secure friendly rear areas, routes of communication, and installations from enemy airborne, air landed, and guerilla forces.
- h. Conduct limited offensive, defensive, and retrograde operations
- i. Maintain liaison with other units.
- j. In emergencies, provide alternate means of communication for other units.
- k. Conduct chemical, biological, and radiological monitoring and survey operations.
- l. Perform damage control operations.

### 4. Characteristics of Armored Cavalry Units

a. *General.* Successful operations by armored cavalry units are dependent on the maximum use of the inherent favorable char-

acteristics of armor-protected firepower, mobility, shock action, extensive and multiple means of communication, and flexibility. These basic characteristics are discussed in FM 17-1.

*b. Armored-Protected Firepower.* Armored cavalry units have mobile, armor-protected firepower in the form of tank weapons, machineguns, and mortars.

*c. Mobility.* Armored cavalry units, being completely mobile, can move rapidly on roads or trails. Their many tracked vehicles provide excellent cross-country mobility. In addition, scout and armored rifle elements can be readily transported about the battlefield by helicopter.

*d. Shock Action.* Shock action in armored cavalry units is provided by the violent impact of the armor-protected firepower of the tanks.

*e. Extensive and Flexible Communication.* Armored cavalry units have an extensive and flexible communication system. Although voice radio is the primary means employed between troop and squadron, CW radio is available to augment voice radio. The CW capability provides a means for maintaining communication over greater distances than with voice radio.

*f. Flexibility.* The cross-country mobility, extensive and flexible communication, and responsiveness to command of armored cavalry units permit them to operate over wide areas and at extended distances in the accomplishment of rapidly changing missions.

## CHAPTER 2

### EMPLOYMENT OF ARMORED CAVALRY UNITS

---

#### 5. General

The employment of armored cavalry units is governed by the principles of war and other guiding fundamentals (par. 7). The success of armored cavalry units depends to a large degree on the tactical ingenuity of commanders in applying these principles and fundamentals.

#### 6. Principles of War

The principles of war govern all military operations. They are the major factors that commanders must consider in achieving success on the battlefield. In combat, the plan of each commander, regardless of level, must be based on a specific mission and on the logical application of the principles of war. Principles of war are discussed in detail in FM 17-1.

#### 7. Fundamentals of Employment

Actions of armored cavalry units in combat are governed by the application of the fundamentals of employment for armor discussed in FM 17-1.

#### 8. Factors Affecting Employment

The successful employment of armored cavalry units is dependent on the commander's careful and continuous consideration of certain influencing factors. These factors are the mission, enemy, terrain and weather, and troops available. A detailed discussion of these factors is contained in FM 17-1.

#### 9. Combat Support for Armored Cavalry Units

Armored cavalry units, depending on their assigned mission and agencies available, may be supported by artillery, engineer, tactical air force, and Army aviation elements. FM 17-1 provides general guidance on combat support for armor units. Specific guidance for armored cavalry units is given throughout this manual at each level and for each type of operation discussed.

**PART TWO**  
**SCOUT PLATOON, ARMOR AND ARMORED INFANTRY**  
**BATTALIONS, AND SCOUT SECTION,**  
**COMBAT COMMAND**

**CHAPTER 3**  
**SCOUT PLATOON, ARMOR AND ARMORED**  
**INFANTRY BATTALIONS**

---

**Section I. GENERAL**

**10. General**

*a.* This chapter covers the organization and the techniques of employment of the scout platoon organic to the armor battalion and armored infantry battalion of the armored division, armor battalion of the infantry division, and nondivisional armor battalion.

*b.* Appropriate parts of this chapter are also applicable to the employment of the scout sections and squads of the armored cavalry platoon and the scout section of the combat command.

**11. Missions of the Scout Platoon**

The scout platoon is organized and equipped to perform reconnaissance, provide security, and execute other missions that assist commanders in the accomplishment of their missions. Missions that may be assigned to the platoon when alone, when reinforced, or when employed as part of a larger force include, but are not limited to:

*a.* Route reconnaissance to bivouac and assembly areas and attack and delaying positions.

*b.* Area reconnaissance of bivouac and assembly areas and attack and delaying positions.

*c.* Screening the front, flanks, or rear of the parent unit by establishing observation posts, listening posts, and patrols.

*d.* Advance or rear guard for the parent unit.

*e.* Air mobile operations to observe, raid, or seize enemy positions or key terrain.

- f.* ~~Combat~~ liaison.
- g.* Contact party.
- h.* Quartering party.
- i.* Traffic control.
- j.* Limited pioneer and demolition work.
- k.* Chemical, biological, and radiological monitoring and survey operations.
- l.* Damage control operations.

## Section II. SCOUT PLATOON ORGANIZATION

### 12. General

The scout platoon consists of a platoon headquarters, a ground radar section, and three scout sections (fig. 2).

### 13. Platoon Headquarters

Platoon headquarters consists of a platoon leader, platoon sergeant, and two light truck drivers. Transportation consists of two  $\frac{1}{4}$ -ton trucks.

### 14. Ground Radar Section

The ground radar section consists of a senior radar operator and two assistant radar operators, one of whom is a driver. The radar equipment consists of one medium range ground radar set designed for combat surveillance. The section is transported in a  $\frac{3}{4}$ -ton truck.

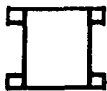
### 15. Scout Section

The scout section consists of two scout squads, each of six men. Each squad consists of a squad leader, assistant squad leader, two scout observers, and two drivers. Transportation consists of two  $\frac{1}{4}$ -ton trucks for each squad—a total of four for the section. A light machinegun, mounted in each  $\frac{1}{4}$ -ton truck, provides the squad with the bulk of its firepower. The section leader also commands the first squad.



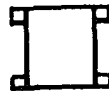
# SCOUT PLATOON HEADQUARTERS

AN/VRQ-1  
AN/PRC-8



PLAT LDR  
SCT DVR

AN/VRQ-1



W/TRAILER

PLAT SGT  
SCT DVR

## FIRST SCOUT SECTION

AN/VRC-8



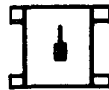
SEC LDR  
SCT DVR  
SCT OBSR

AN/PRC-8



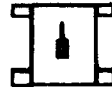
ASST SQD LDR  
SCT DVR  
SCT OBSR

AN/VRC-8



SQD LDR  
SCT DVR  
SCT OBSR

AN/PRC-8



ASST SQD LDR  
SCT DVR  
SCT OBSR

SECOND SCOUT SECTION AND  
THIRD SCOUT SECTION ARE THE  
SAME AS THE FIRST SCOUT SECTION

## GROUND RADAR SECTION

AN/VRC-8



3/4-TON  
TRUCK

SR RAD OP  
2 RAD OP

NOTE: There are slight radio equipment differences in the scout platoon of the armored infantry battalion, armor battalion of the infantry division, and non divisional armor battalion.

Figure 2. Manning chart of scout platoon.

### Section III. DUTIES OF KEY PERSONNEL

#### 16. General

The platoon leader and noncommissioned officers in the scout platoon must be capable of effectively employing the personnel and equipment for which they are responsible. These leaders must be able to react swiftly to changing situations and perform with speed and daring. Each must be able to employ his element alone or as part of a combined arms team.

#### 17. Duties of Platoon Leader

Although the scout platoon leader is directly responsible to the headquarters and headquarters company commander of the parent battalion for the discipline, combat readiness, training, and control of his platoon, and for its maintenance, and equipment, the platoon is employed tactically under control of the battalion commander. The platoon leader must have a thorough knowledge of battalion tactics and be proficient in the tactical employment of the platoon. He must know the capabilities and limitations of the personnel and equipment in the platoon and must be thoroughly familiar with all aspects of armor command and leadership as discussed in FM 17-1.

#### 18. Duties of Platoon Sergeant

The scout platoon sergeant commands elements of the platoon as directed by the platoon leader and assumes command of the platoon in the absence of the platoon leader. During tactical operations, he may assist in control of the platoon. The platoon sergeant assists the platoon leader in maintaining discipline, in training, and in maintaining control of the platoon. He assists also in matters pertaining to maintenance of equipment, supply, and other administrative matters of the platoon.

#### 19. Duties of Section and Squad Leaders

Section leaders are responsible to the platoon leader for the training, discipline, tactical employment, and control of their sections. They closely supervise the maintenance and operation of all vehicles and equipment organic to their units. Squad leaders have generally the same responsibilities with respect to their squads as section leaders have to their sections.

## Section IV. COMBAT OPERATIONS OF SCOUT PLATOON, GENERAL

### 20. General

*a.* This section covers techniques used by the scout platoon in reconnaissance, security, attack, defense, and delay missions. These techniques are also applicable to scout elements of the armored cavalry platoon.

*b.* The scout platoon is most effectively employed as a unit, and is reinforced as necessary for accomplishment of a mission. It uses ground vehicles or supporting Army aircraft in the execution of its missions.

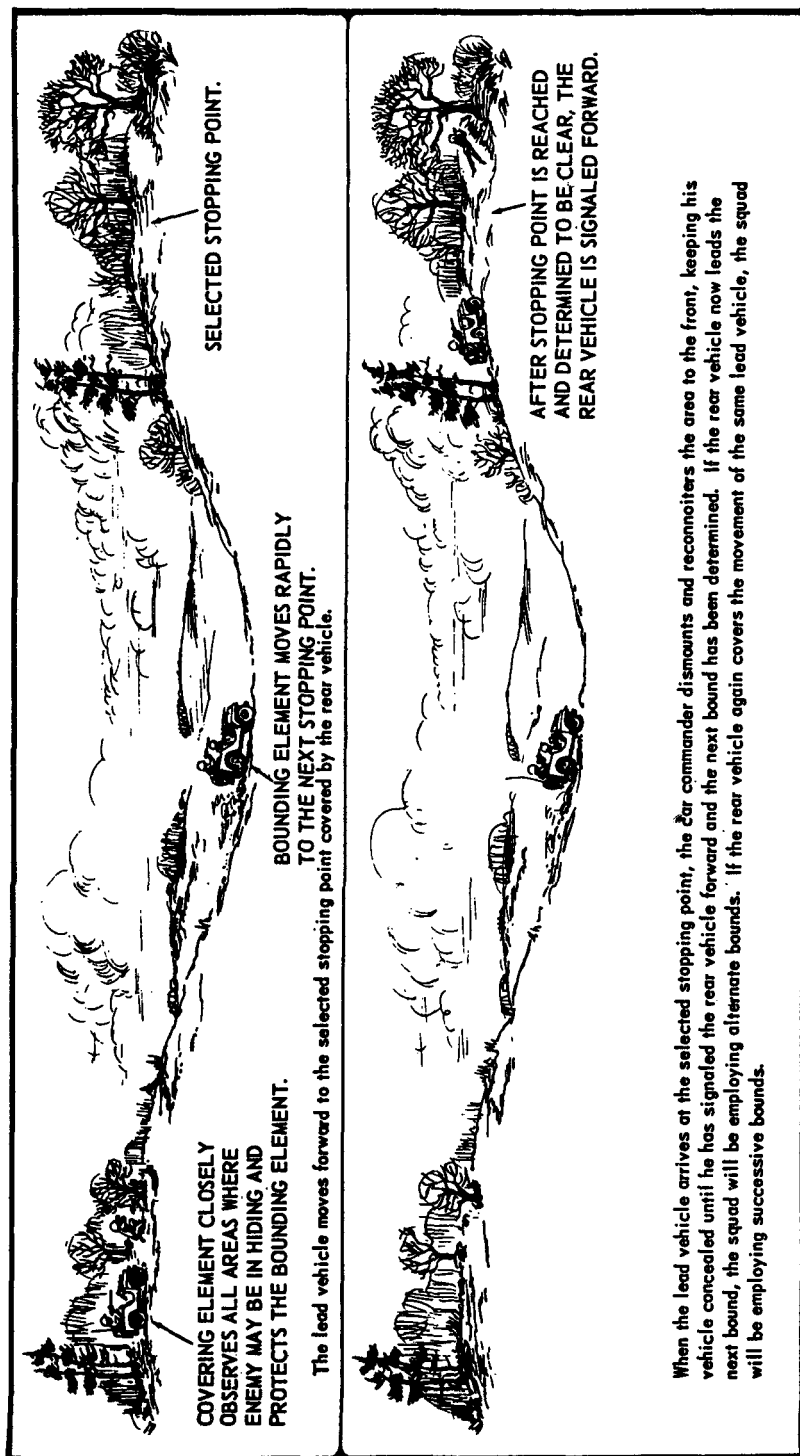
### 21. Movement to Contact

*a. General.* The scout platoon may be required to lead an advance to contact of its parent battalion. Ground movement to contact by scout elements combines mounted movement with dismounted movement to ensure security against enemy ground observation and direct fire. All scouts should master the techniques of mounted and dismounted ground movement.

*b. Formations.* The formation adopted must be flexible so that each new situation may be met effectively. The relationship of the formation to the parent unit will be dictated by the mission.

*c. Mounted Movement.* Mounted scout elements normally work in pairs and move by bounds (par. 22). When enemy contact is imminent, one element normally remains stationary and covers the movement of another element with observation and fire (fig. 3). This procedure assists in locating enemy positions, furnishes fire to cover the movement of leading vehicles, and ensures rapid transmission of information. The basic techniques of movement used by the scout platoon are as follows:

- (1) Before moving, the leading scout element must determine its next position and a favorable route to it. During movement, the scout element must move as rapidly as the situation permits, and must be on the alert for enemy troops, cover, and concealment.
- (2) When approaching a position that will afford new areas of observation, the commander of the leading vehicle should stop his vehicle and dismount while in defilade to prevent enemy forces beyond the position from detecting his presence. The fundamentals of individual movement discussed in FM 21-75 are applicable. When the position is secure, the overwatching scout element moves forward.



*Figure 3. Scout squad moving by bounds.*

- (3) Personnel must not become vehicle-bound. They should dismount in order to improve observation, to prevent enemy detection, and to provide security.
- (4) The distance of each bound is determined by the nature of the terrain and the range at which the covering element can effectively support the moving element. Normally, this distance should not exceed the effective range of small arms fire.
- (5) Movement in each bound must be completed rapidly; however, it should not be done so rapidly that efficiency of operation and coordination between elements are lost.
- (6) When covering elements have been signaled forward, they should take the shortest and fastest route forward to avoid delaying the continuation of movement.
- (7) Movement is oriented on the enemy, the main body, or terrain features as directed by the platoon leader.
- (8) When the movement of advancing vehicles is being covered, observation must be directed at terrain from which fire is expected and not on the moving vehicles. By doing this, the crews of the supporting vehicles are usually able to detect the enemy or hostile fire more easily.

*d. Dismounted Action.* When a squad, section, or platoon moves dismounted, it should apply the principles described in FM 17-20 and FM 21-75. All scout personnel must be skilled in map reading and able to maintain direction of movement during all conditions of visibility and terrain.

## 22. Successive and Alternate Bounds

Vehicles within the scout squad, scout squads within the section, or sections within the platoon may advance employing either successive or alternate bounds.

*a. Successive Bounds* (fig. 4). In this method, the leading element, covered by the rear element, advances and takes up positions to support the advance of the rear element. The rear element, upon arriving at a position abreast of the leading element, halts and again supports the advance of the leading element. Only one element moves at any one time.

*b. Alternate Bounds* (fig. 5). In this method, the leading element halts and takes up positions to support the advance of the rear element, which then advances past the leading element and takes up positions. The initial leading element then "leapfrogs" the initial rear element and advances to a new position. Only one element moves at any one time. This method of movement is usually more rapid than successive bounds.

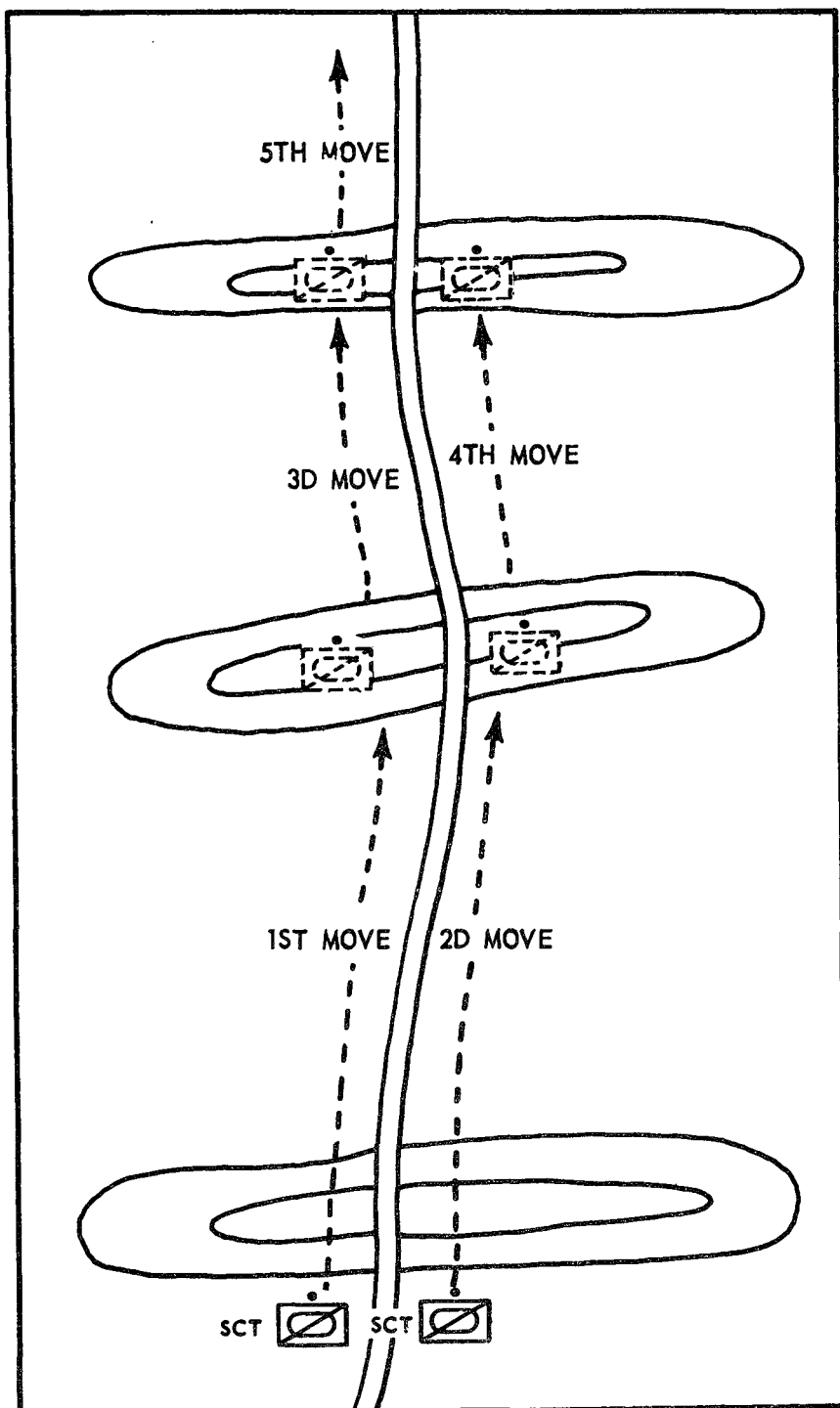


Figure 4. Scout section movement by successive bounds.

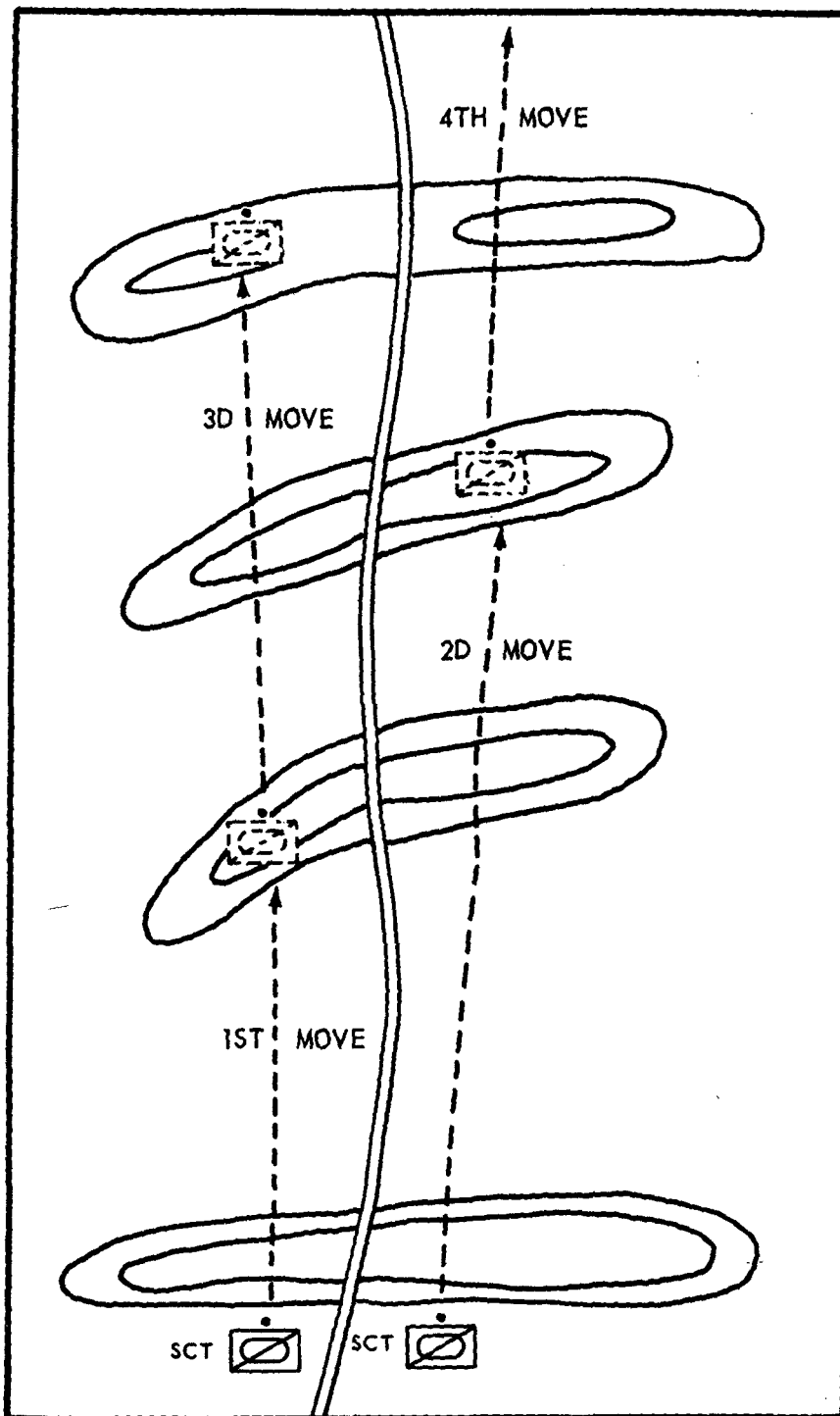


Figure 5. Scout section movement by alternate bounds.

## 23. Observation by Scouts, General

As enemy contact becomes imminent, observation becomes very important. Movement is undertaken only after thorough observation has been accomplished. Observation by all scouts must be continuous and systematic. To ensure the best results from observation, scout leaders should see that:

*a.* Personnel make maximum use of binoculars and observation telescopes.

*b.* Concealed positions are selected that offer good observation of the area to be covered. Observers should be dismounted from their vehicles.

*c.* Terrain is searched in strips as explained in FM 21-75.

*d.* At least two observers are used to form a team. One observer watches the area in general to detect any movement, while the other conducts a systematic search with binoculars or observation telescope.

*e.* All-round observation is maintained. This is accomplished by assigning a sector to each individual in the vehicle crew. When working by squad or section, each vehicle crew may be assigned a primary sector to observe.

*f.* When the movement of other vehicles is being covered, observation is on the terrain from which fire is expected and not on the moving vehicles. Stationary personnel can usually detect hostile fire or movement more easily than those in moving vehicles; therefore, personnel in moving vehicles should be alert for signals.

*g.* Personnel are trained to identify targets or possible target areas quickly.

*h.* When a scout squad is observing from a stationary position, the squad leader organizes his personnel so that they can obtain adequate rest yet make maximum use of the observation equipment available.

*i.* Constant liaison and communication with adjacent units are maintained. This will aid in keeping an enemy force under continuous observation when it moves. Scout units must be able to receive and pass on observation assignments so that contact with the enemy can be maintained.

## 24. Establishing Observation Posts

*a.* The purpose of an observation post (OP) is to provide early warning of enemy approach; report the location, strength, disposition, and movement of the enemy; and adjust long range fires



that will cause early deployment of the enemy and inflict casualties. (See FM 21-75.) Observation of the enemy must be maintained as long as possible; therefore, OP personnel must be prepared to remain in a position until it becomes untenable and to move quickly when so ordered.

b. The scout platoon normally establishes six OP's (one per scout squad); however, it may establish up to twelve OP's (two per scout squad) for a limited time. In determining the number of OP's to be established, the platoon leader must consider that his ability to conduct patrolling between OP's diminishes as he increases the number of OP's.

c. Normally, the scout platoon leader selects the general position for each OP. The specific location is then selected by the scout squad leader. Each OP must have communication means and the necessary personnel to observe and provide security for its operation. Areas that cannot be observed from established OP's must be covered by ground or aerial patrols.

d. In the selection of an OP position, consideration should be given to overlapping fields of observation with other OP's, concealment of the OP and routes thereto, ease of installation and maintenance of communication, and avoidance of landmarks. The position should be located on ground high enough to provide as wide and deep a field of view as possible and good observation of likely enemy avenues of approach. The choice of a position on the topographic crest or on the forward slope of a hill will depend on the terrain and mission. A crest position allows initial occupation during daylight, allows greater freedom of action, and facilitates installation, maintenance and concealment of communication equipment. A forward slope position affords a better view of the immediate foreground and a good background for concealment. Normally, scouts will occupy a crest position (fig. 6).

e. Scouts employed to operate observation posts do not fire their weapons except to defend themselves or cover their withdrawal. The noncommissioned officer in charge of the OP is responsible for keeping the area of responsibility under constant observation. Generally, two men observe, one man operates the radio or telephone, and the remainder provide security. When an observation post is occupied, its position and other prominent terrain features should be accurately located by map to assist in reporting information and adjusting fires. Vehicles must be placed under cover and concealment. Remote control equipment may be used by the observers to send information to the vehicular-mounted radio, which then sends it to higher headquarters.

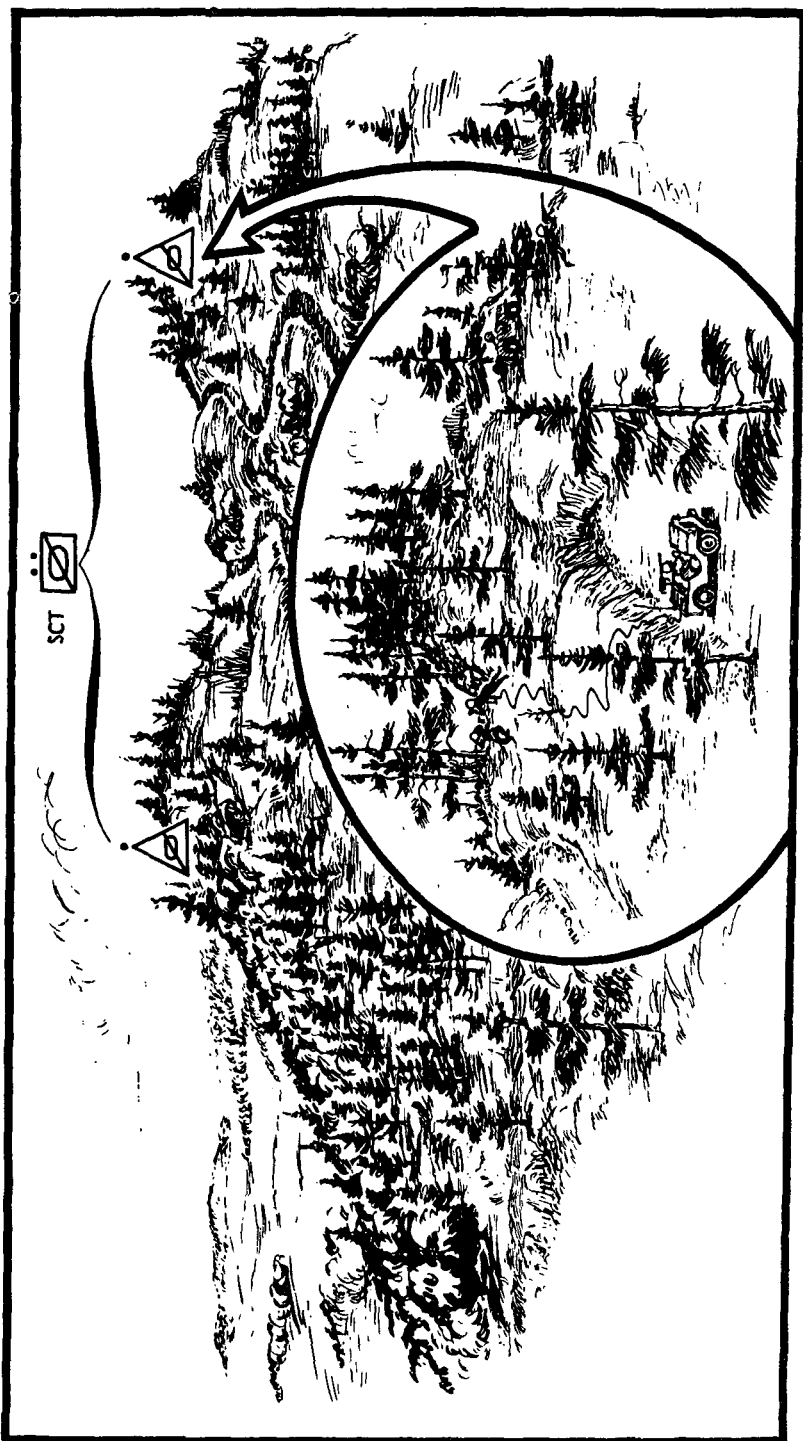


Figure 6. Observation post established by a scout section.

f. When manning observation posts, scouts may often work in conjunction with Army aircraft and with ground surveillance devices.

## 25. Establishing Listening Posts

During hours of darkness, listening posts may be established near the main body or in the vicinity of the daylight OP's. Listening posts should be positioned to cover likely enemy avenues of approach. Observers must use both their sight and hearing. Observation telescopes and binoculars are equally important at night and during daylight. The organic medium range radar set may be employed to supplement the surveillance effort. Warning devices, such as trip flares and mines, may also be used for detection and local security. Normally, vehicles are secured within a strong-point or other secure position. Ground portable radios or telephones are used for communication.

## 26. Firepower of Scout Platoon

a. *General.* For organic weapons, the scout platoon has rifles, machineguns, and rocket launchers. Supporting fires are provided by artillery, mortars, and, on occasion, tanks. Frequently, scouts will be required to request and adjust artillery or mortar fire; therefore, all scouts must be thoroughly trained in observed-fire procedure (FM 6-135). Also, since scouts must be prepared to fight when necessary, they must be proficient in the use of all organic weapons. The scout platoon leader and section leaders must be able to control and coordinate fires.

b. *Rifle Fire.* Each member of the scout platoon is armed with a rifle. When required to fight dismounted without machineguns, each scout section must be able to function essentially the same as a rifle squad and each scout squad as a fire team. The techniques of fire coordination as discussed in FM 7-10, FM 17-20, and FM 23-5 are appropriate to scout elements.

c. *Machinegun Fire.* Scout personnel must be adept in placing their machineguns in action from either the vehicular mount or the ground mount. The scout section or squad leader must be able to ascertain which mount is better suited for the mission. Area fire technique will usually be employed from either mount.

- (1) *Mounted action.* Machinegun fire is normally delivered from the truck pedestal mount when movement does not allow time for dismounted action or when effective fire may be delivered from the pedestal mount. This technique is employed when:

- (a) Conducting reconnaissance by fire.
  - (b) Returning enemy fire.
  - (c) Covering moving elements.
  - (d) The vehicle is in defilade or adequately concealed.
- (2) *Dismounted action.* Machineguns on ground mounts will be employed as explained in FM 17-20 and FM 23-55.

*d. Rocket Launchers.* Each scout squad is equipped with a rocket launcher, which is used for close-in antitank protection. All scout personnel should be capable of loading and firing this weapon; however, two specific individuals should be assigned to each rocket launcher as their secondary crew-served weapon.

## 27. Communication in Scout Platoon

*a.* The communication means available to the scout platoon and scout section permit the rapid transmission of information. Information and orders must be transmitted without delay, and communication must be maintained throughout the period of operations. If radio contact cannot be maintained, messengers or relay stations (air or ground) should be used to reestablish communication. When communication with the next echelon of command is disrupted, scout units will bypass this echelon and send information directly to the higher headquarters.

*b.* The following are of importance to scout units in maintaining contact:

- (1) All scouts should be thoroughly trained in the operation of FM radios, radio procedure, and communication security. Personnel should be trained to perform authorized maintenance and to make proper use of communication expedients when operational urgency dictates.
- (2) Vehicular-mounted and portable radios must be used in their most efficient combination for a given situation. Remote control units are important during operations that preclude the use of vehicles at a key point.
- (3) All scouts must be trained as messengers and to prepare clear and concise oral and written messages. When communicating by messenger, the scout platoon leader must consider the importance of the message before dispatching a vehicle with its crew. When a vehicle is diverted to messenger service, the platoon's scout squad loses a vehicle, and the squad's combat potential is reduced considerably.
- (4) Wire communication may be used when required by the situation.

- (5) Plans should be made for visual and sound means of communication before an operation starts. These means can be especially useful for transmitting short, prearranged messages.

## 28. Reporting Procedures

The most important contribution made by the scout platoon during reconnaissance or security missions is the accurate and timely reporting of information concerning the enemy and the area of operations.

*a. Information and Reports of the Enemy.* All information obtained during the performance of a given mission should be reported, regardless of its apparent value. Negative reports are sometimes of significant importance and therefore should be rendered whenever appropriate. Initial contact with the enemy is reported immediately. Information of the enemy must be accurate and must answer the questions:

- (1) What enemy was observed and in what strength?
- (2) Where was the enemy observed?
- (3) When was the enemy observed?
- (4) What was the enemy doing?

*b. Information and Reports of the Area of Operations.* When information about an area of operations is desired, such as information of a particular route or area, personnel must be thoroughly briefed on what information is desired and where it is to be sought. They must be familiar with the requirements for assembly areas and attack positions, the techniques and procedures of route reconnaissance as discussed in FM 5-36, and the effects of weather and terrain on various types of operations. The SOP of the higher unit should prescribe a format for reporting this information so that reports are concise, complete, and timely. Time permitting, an overlay or sketch of an area, delivered by messenger, is an effective means of reporting.

*c. Information and Reports of Own Unit.* Scout elements must keep their higher headquarters continually informed as to their own location. This information may be reported according to a time schedule or as predetermined positions are reached. Check points, phase lines, and coded coordinates can be used effectively in reporting these locations.

## 29. Pioneer Work by Scout Platoon

*a. General.* The scout platoon may be ordered to perform limited pioneer and demolition work. This type of mission may in-

clude the installation or clearance of minefields and other obstacles; destruction of bridges, buildings, supplies, and equipment; and the preparation of fording sites.

*b. Equipment.* Axes and shovels that are carried on all vehicles and the demolition set in the platoon headquarters can be used effectively in pioneer and demolition work.

*c. Pioneer and Demolition Work.* Pioneer and demolition work must be coordinated with the unit for which it is being performed. Priority of demolition work, based on the mission, enemy, and terrain should be established. When the platoon is required to install minefields, records and reports must be made in accordance with guidance in FM 20-32. FM 5-34 contains engineer field data for pioneer and demolition work.

## Section V. EMPLOYMENT OF MEDIUM RANGE GROUND RADAR

### 30. General

*a.* The medium range ground radar may be operated by the scout platoon when its use will contribute to the accomplishment of the platoon's mission. The radar will usually be employed directly under battalion control. It may be attached to another combat element of the battalion.

*b.* The radar should normally be located within or near the position of a combat element of the battalion for security. In the event that mission or terrain conditions demand a location for the radar which is not near a combat unit, it may be necessary to assign a scout section or squad the mission of providing for its security. The set should be operated on an irregular time schedule to reduce the possibility of detection by the enemy.

### 31. Missions

The missions assigned to the medium range ground radar are normally derived from the battalion surveillance plan. The radar is used to monitor, scan, or search a specified area. The mission assigned should include the type of radar surveillance to be conducted, the operating schedule, duration of the mission, area to be covered, and manner of reporting information.

### 32. Employment

*a.* The primary requirement for effective employment of the ground radar set is that it be situated for line-of-sight operation. It must be oriented in azimuth and located on the map to enable the operator to accurately locate targets on the ground.

b. In defensive and retrograde operations, the medium range ground radar may be used to monitor the main enemy avenue of approach and to scan critical areas or gaps between strongpoints. It is most effectively used during periods of limited visibility to augment other battalion security measures.

c. In offensive operations, the radar may be used to assist in providing flank security or to scan beyond the line of contact. It should be positioned well forward during the attack to allow scanning of the objective prior to and during the assault. Once the objective is reached, the radar may be used to maintain surveillance on likely enemy avenues of approach and thus provide early warning of a counterattack.

d. FM 17-1 contains additional information on the employment of the medium range ground radar.

## Section VI. SCOUT PLATOON, RECONNAISSANCE MISSIONS

### 33. General

a. For a general discussion of reconnaissance missions see chapter 14.

b. In executing reconnaissance missions, the scout platoon obtains information by stealth, infiltration, and observation. When employed on a reconnaissance mission as part of a larger force, the scout platoon often executes its assigned mission while being overwatched and supported by other elements of the force.

c. The method by which the platoon performs its mission is determined by the mission, enemy situation, terrain and weather, and specific instructions received from the battalion or other appropriate commander. The type of reconnaissance and the specific information desired also affect the method employed.

d. The medium range ground radar set may frequently be employed by the platoon during reconnaissance missions.

### 34. Route Reconnaissance

a. *General.* The scout platoon is particularly well suited to perform route reconnaissance missions for the parent battalion. It may perform reconnaissance on one or more routes simultaneously.

b. *Type of Information.* All information obtained during the conduct of a route reconnaissance should be reported regardless of its apparent value.

- (1) The specific information of a given route or series of routes will include minimum width of roads, types of

roads (all-weather, limited all-weather, and fair weather), load-carrying capacity of roads and bridges on the route, and the existence and effect of obstructions or other limiting factors.

- (2) Reconnaissance of a bridge includes checking both underneath and on top for mines, boobytraps, demolition charges, and purposely weakened construction.
- (3) Information of the enemy and area of operations should be reported in conformance with paragraph 28.

*c. Conduct.*

- (1) *One route.* When the platoon is reconnoitering one route, the leading section normally moves by bounds, covering the main route, while the other section covers lateral routes and critical terrain features.
- (2) *Multiple routes.* When a scout platoon is required to reconnoiter more than one route, each scout section may be assigned the mission of reconnoitering a route. The section will reconnoiter an assigned route by employing the scout squads in closely coordinated moves (fig. 7). While one squad moves by bounds to reconnoiter the main route, the other squad is used to reconnoiter lateral routes and key terrain features along the main route. The squad which is in the lead and reconnoitering the main route must regulate its movement so that the other squad reconnoitering to the flanks can keep up. To keep the two squads moving together, the squad operating on the main route may check some portion of the lateral routes or terrain features, or the squads may be alternated along the main route and lateral routes or terrain features. When the squads alternate, the leading squad moves along the main route until it comes to a lateral route or a terrain feature which must be reconnoitered. While this is being done, the rear squad moves up and continues along the main route until it reaches other lateral routes or terrain features which must be investigated.

*d. Action on Contact.*

- (1) When an enemy force is encountered, the platoon leader should immediately deploy the platoon, report the enemy contact to his higher headquarters, develop the situation, and choose a course of action. Then he should report the situation that has been developed and his course of action.



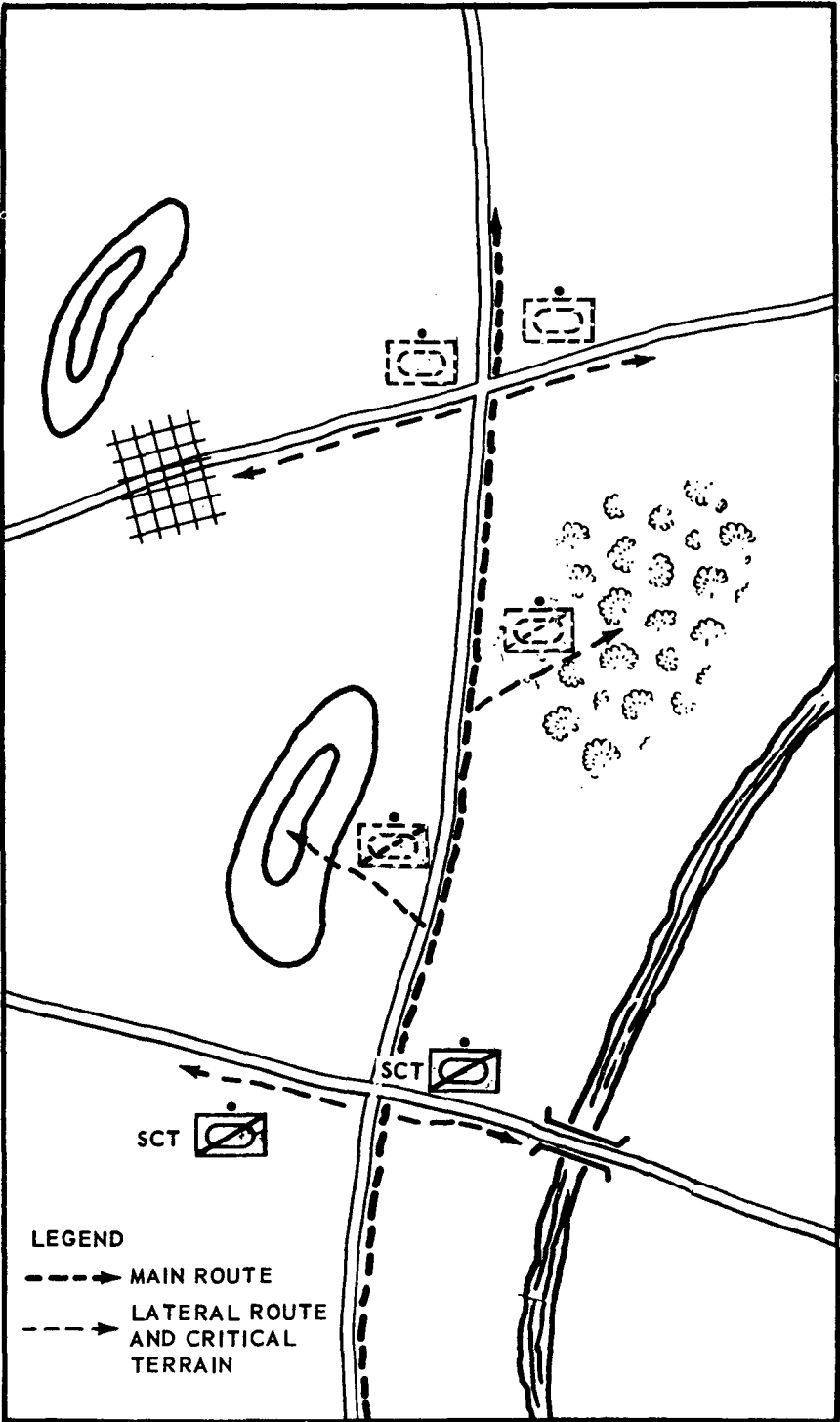


Figure 7. Scout section performing route reconnaissance.

- (2) In the development of the situation, mounted and dismounted patrolling and reconnaissance by fire are undertaken immediately to determine the location, strength, composition, and disposition of the enemy.

*e. Action at an Obstacle.*

- (1) When an obstacle is encountered during the route reconnaissance, its location and description are reported. The platoon takes the necessary action to reduce the obstacle if such action is within its capabilities and does not interfere with the accomplishment of the mission.
- (2) When the obstacle cannot be readily reduced, the platoon bypasses the obstacle, reports the bypass, and, if appropriate, recommends to higher headquarters the action necessary to eliminate the obstacle.
- (3) When the resistance encountered will interfere with the assigned mission, the platoon leader reports accordingly and attempts to bypass to continue his mission. When a bypass is found, it is reported to the higher unit commander and the platoon continues on its original mission unless otherwise directed.

### 35. Zone Reconnaissance

*a. General.* In a zone reconnaissance, the scout platoon operates generally in the same manner as in a route reconnaissance. The formation adopted will depend on the width of zone, terrain, vegetation, enemy situation, time allocated to complete the mission, and thoroughness of effort desired. In a zone reconnaissance, elements of the platoon should move over routes that afford the fastest and most complete coverage of the zone.

*b. Conduct.* In conducting a zone reconnaissance, the scout platoon normally uses a line formation. If only two sections are required abreast, the third section may be employed to protect an exposed flank, to be a reserve, or to reconnoiter terrain features that will expedite the conduct of the zone reconnaissance. Each squad must make maximum use of observation points along its route to rapidly cover the entire zone.

*c. Action on Contact.* See paragraph 34.

### 36. Area Reconnaissance

*a. General.* In an area reconnaissance, the scout platoon moves directly to the area to be reconnoitered. Any enemy opposition encountered en route to the area should be reported and bypassed. When the platoon has arrived at the designated area, it may per-

form reconnaissance in the same manner as in a zone reconnaissance or move directly to preselected points of observation from which the area can be observed. The area may be divided into sectors, so that each scout section reconnoiters a portion of the area, or the scout platoon may reconnoiter the area as a whole, with scout sections operating under control of the platoon leader and canvassing the area in a systematic manner. Upon completion of an area reconnaissance, the platoon may be required to secure the area until other friendly troops arrive. If the time element, distance involved, terrain obstacles, and enemy activity dictate, the platoon may be moved, with or without vehicles, by Army aircraft near to or into the area to be reconnoitered.

*b. Action on Contact.* See paragraph 34.

## Section VII. SCOUT PLATOON, SECURITY MISSIONS

### 37. General

*a.* The scout platoon may be employed on a security mission whenever the battalion needs a light security force during offensive, defensive, or retrograde operations. Security missions performed by the scout platoon include advance guard, flank guard, rear guard, and screening force missions. The most effective employment of a platoon assigned an advance, flank, or rear guard mission requires reinforcement with tanks, riflemen, and fire support. In the performance of a security mission, the scout platoon should adhere to the basic fundamentals of security discussed in FM 17-1.

*b.* When Army aviation is available, communication should be established between scout elements and Army aircraft to ensure a constant exchange of information about enemy activity in the area of interest.

### 38. Scout Platoon in Advance Guard

*a. General.* Normally the battalion task force will employ a company-size unit as the advance guard; however, all or part of the scout platoon may be attached to the advance guard or work in close coordination with it.

*b. Conduct.* The scout platoon may provide flank security for the advance guard or be the leading element of the advance guard, particularly when contact with the enemy is not imminent. It will normally be directed to maintain a prescribed rate of advance. It is the responsibility of the scout platoon leader to maintain this rate of advance unless the platoon is stopped by enemy action or an obstacle. When enemy resistance is encountered, the platoon

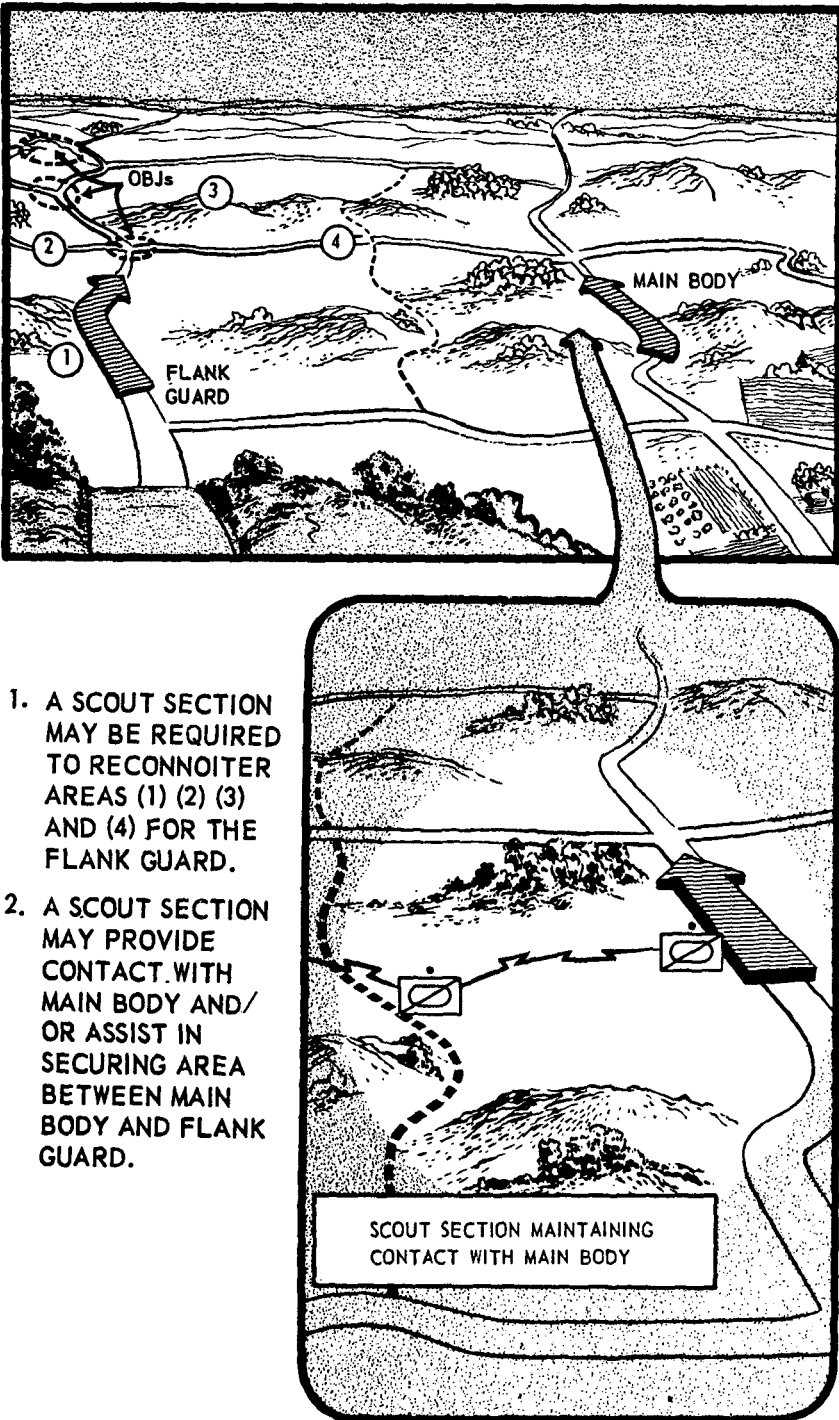


Figure 8. Scout section performing as part of a flank guard.

should immediately deploy, report contact, and develop the situation to determine the size and extent of the enemy force. Tanks and armored infantry elements from the advance guard should be committed promptly to destroy or disperse the enemy. If an obstacle is encountered, the scout platoon leader must immediately report the situation to the advance guard commander and reconnoiter for a suitable bypass.

### 39. Scout Platoon in Flank Guard

*a. General.* When the scout platoon performs a flank guard mission, it is usually reinforced with tanks or armored infantry, or is employed as part of a larger force.

*b. Conduct.* In the accomplishment of a flank guard mission, either reinforced or as part of a larger force, the scout platoon is frequently employed to establish observation posts, conduct patrols, and maintain contact with the main body, which may be stationary or moving. The scout platoon leader must determine the specific friendly element with which contact should be maintained and must assign this mission to a specific scout section. When the main body is moving, the remainder of the flank guard will move on a route parallel to the main body and perform flank security (fig. 8).

### 40. Scout Platoon in Rear Guard

*a.* The scout platoon may participate as part of a larger force or be reinforced when required to perform as a rear guard. When so used, the scout platoon will protect the rear of the main body from enemy ground observation and attack. The rear guard will follow the main body at a distance normally prescribed by the main body commander.

*b.* The scout platoon normally participates in a rear guard action as part of a larger force. The platoon may be effectively employed on one or both flanks of the rear guard to prevent the enemy from bypassing the rear guard and striking the main body.

### 41. Scout Platoon as Screening Force

*a.* A screening force is a security detachment which protects an area or body of troops from surprise by observing and reporting enemy activity. It normally is conducted over an extended area.

*b.* The scout platoon may be assigned a screening mission by the battalion commander (fig. 9). The frontage which a platoon can screen is determined by the limit of observation afforded by terrain and visibility, the number of patrols required, and com-

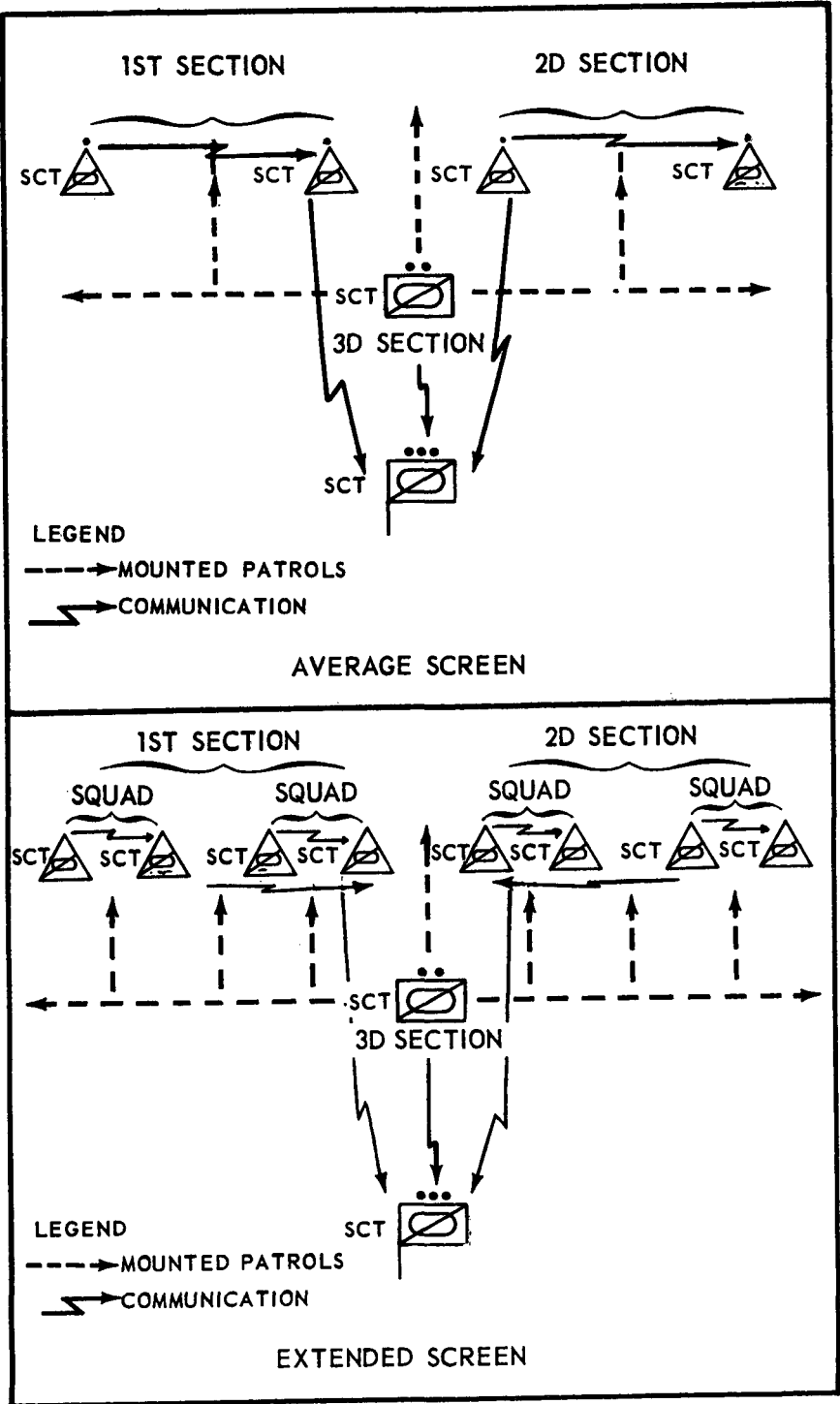


Figure 9. Scout platoon screen.

munication facilities. Due to extended frontages, maximum use must be made of the platoon sergeant and his vehicle and radio to assist in controlling and coordinating the action of the platoon. Once contact is made with an advancing enemy force, the platoon should remain in contact.

*c.* When acting as a screening force, the scout platoon secures its assigned area by establishing observation posts and conducting patrols. At night, listening posts replace the observation posts. Since the screen will normally cover an extended area, the scout section must select observation posts that give the widest field of vision. Dead space between observation posts should be covered by mounted patrols. If the screen is required to remain mobile and move with the main body, elements of the screen must move by bounds so as to keep abreast of the main body. When the enemy is observed, the observation post notifies the platoon leader, who in turn notifies the main body commander. The scout squad occupying the observation post remains in visual contact with the enemy and withdraws by bounds.

*d.* In a screening mission the medium range ground radar set will normally be operated under platoon control.

*e.* The techniques of establishing observation posts and listening posts are discussed in paragraphs 24 and 25.

## Section VIII. SCOUT PLATOON IN OFFENSIVE OPERATIONS

### 42. General

*a.* The scout platoon will attempt to accomplish assigned missions without resorting to offensive combat; however, in some situations, the platoon may be required to attack light enemy forces and therefore must be prepared for this type of action.

*b.* The scout platoon employs a base of fire and maneuvering force in the attack.

*c.* FM 17-1 discusses the fundamentals of attack, control measures, and basic considerations of offensive action.

### 43. Planning and Preparation for Attack

*a.* The scout platoon leader in planning for an attack follows the same troop leading procedures as an armored cavalry platoon leader (ch. 7). The scout platoon leader must recognize the limitations of his platoon in accomplishing combat missions.

*b.* The discussion in FM 17-1 covering troop leading procedures is applicable to the scout platoon leader.

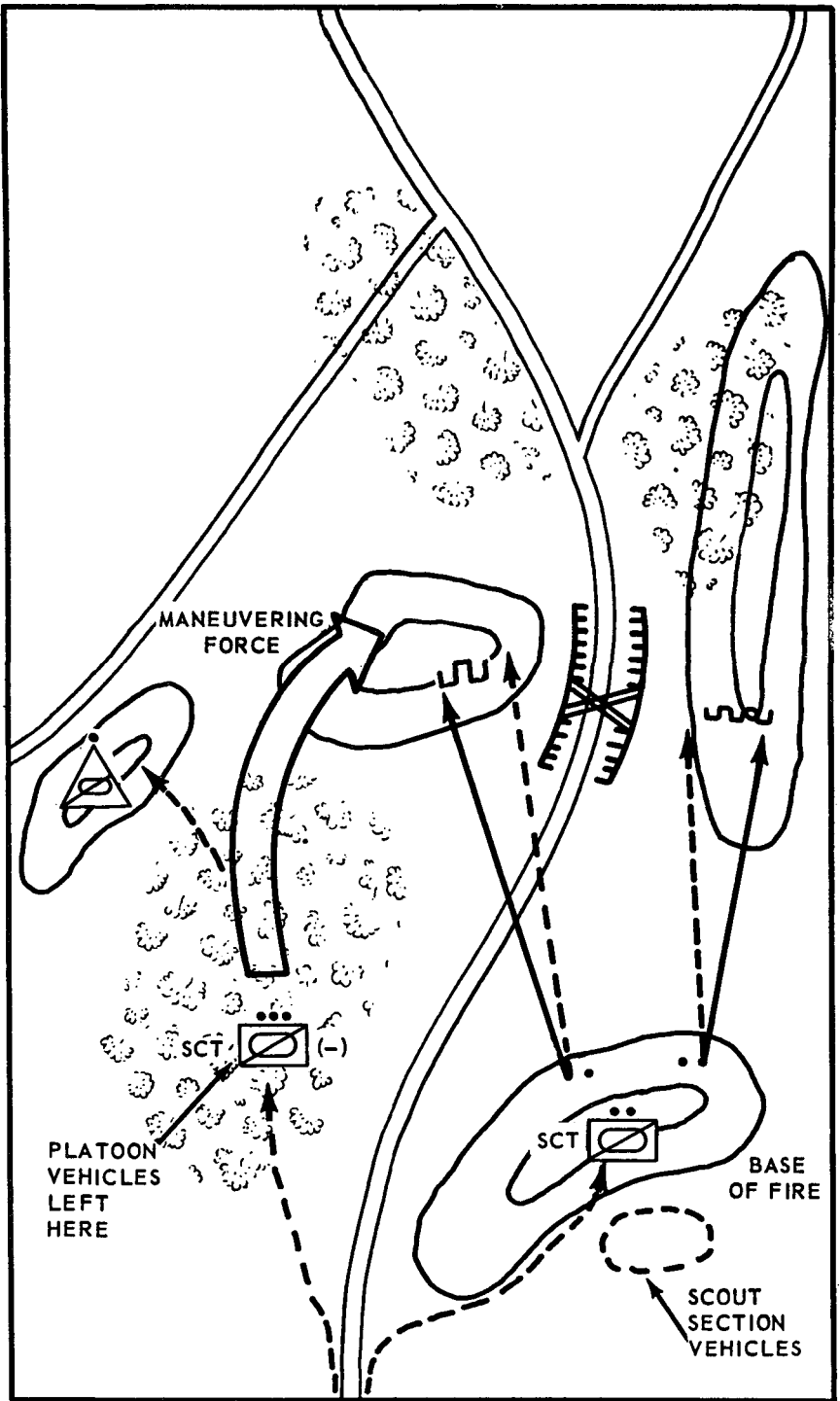


Figure 10. Attack of a lightly held roadblock by a scout platoon.



#### 44. Conduct of Attack

*a.* The scout platoon may remain mounted in the attack and advance by bounds either to the limit of cover and concealment or until fire is received from enemy positions. On dismounting, the scout platoon retains its organization, however each scout section may operate as a rifle squad or as two machinegun squads. The machinegun squads may use one or two machineguns. The techniques of conducting a dismounted attack are the same as for armored infantry and are discussed in FM 17-20. The platoon vehicles should be located in a position to the rear, and sufficient personnel left with them to provide security. Personnel remaining with the vehicles move them forward on order.

*b.* When surprise is of the utmost importance, the scout platoon may move dismounted over the entire distance from the line of departure to the objective. In such situations, the base of fire will not begin firing until the maneuvering element is discovered or fire is requested. This technique is often effective at night or during periods of limited visibility.

*c.* Scout elements must frequently be employed in the base of fire. These elements should make maximum use of machineguns to keep a heavy volume of fire on the enemy. The base of fire keeps the enemy pinned down while the maneuvering force closes on the enemy position.

*d.* When the scout platoon attacks, the platoon leader should obtain supporting fires from artillery and mortars. These supporting fires are obtained by the scout platoon leader through the battalion commander, operations officer, artillery liaison officer working with the battalion, or mortar platoon leader. A forward observer, either artillery or mortar, may be available to assist in requesting and controlling fires. If not, scouts may request and control supporting fires.

*e.* Figure 10 illustrates a situation in which a scout platoon attacks to destroy a lightly held enemy roadblock. One scout section is employed in the base of fire, and two sections in the maneuvering force.

### Section IX. SCOUT PLATOON IN DEFENSIVE OPERATIONS

#### 45. General

As in offensive action, the scout platoon seldom conducts a defense alone. It will usually participate in a defensive operation as part of the battalion task force. Most defensive actions which the scout platoon performs alone will consist of temporary defensive

measures. These actions are followed either by a relief in place by a portion of the main body or by a delaying action. The scout platoon may be required to defend alone when:

- a. It performs a security mission that requires the establishment of a blocking position.
- b. It performs a security mission as part of an outpost system.
- c. It is unexpectedly confronted by a superior enemy force.
- d. It becomes isolated by enemy action.

#### **46. Organization of a Defensive Position**

a. When the scout platoon must defend on a specific terrain feature, the platoon leader must reconnoiter, plan, command, and control in accordance with guidance outlined in FM 17-1. The scout platoon will normally organize a compact, all-round defense, making maximum use of automatic weapons to provide protective fires (fig. 11). Rocket launchers are used to cover the most likely armor avenues of approach into the position.

b. Fire support, either mortar or artillery, should be requested in the same manner as for offensive action. These fires should be integrated into the plan of defense and cover areas that organic weapons cannot adequately cover.

#### **47. Employment of Scout Platoon in Mobile Defense**

The scout platoon will normally participate in the mobile defense as part of the battalion task force. Normally the scout platoon will be used for local security of the task force or to provide patrols to cover gaps between elements of the task force. Specific missions that may be assigned to the scout platoon in mobile defense include manning observation posts for the battalion, performing route reconnaissance for the striking force, and acting as a flank screening element for the task force during a counter-attack.

#### **48. Employment of Scout Platoon in Position Defense**

In the position defense as in the mobile defense, the scout platoon is most effectively employed when assigned missions using its reconnaissance and security capabilities. The scout platoon normally provides local security to prevent surprise attacks, or it supports the reserve. It may also be employed as part of a covering force or general outpost, or as part of the combat outpost. When supporting the reserve, the scout platoon may be assigned a route reconnaissance mission to determine the feasibility of committing the reserve along a specific route. It may also perform as a flank screening force for the reserve during a counterattack.

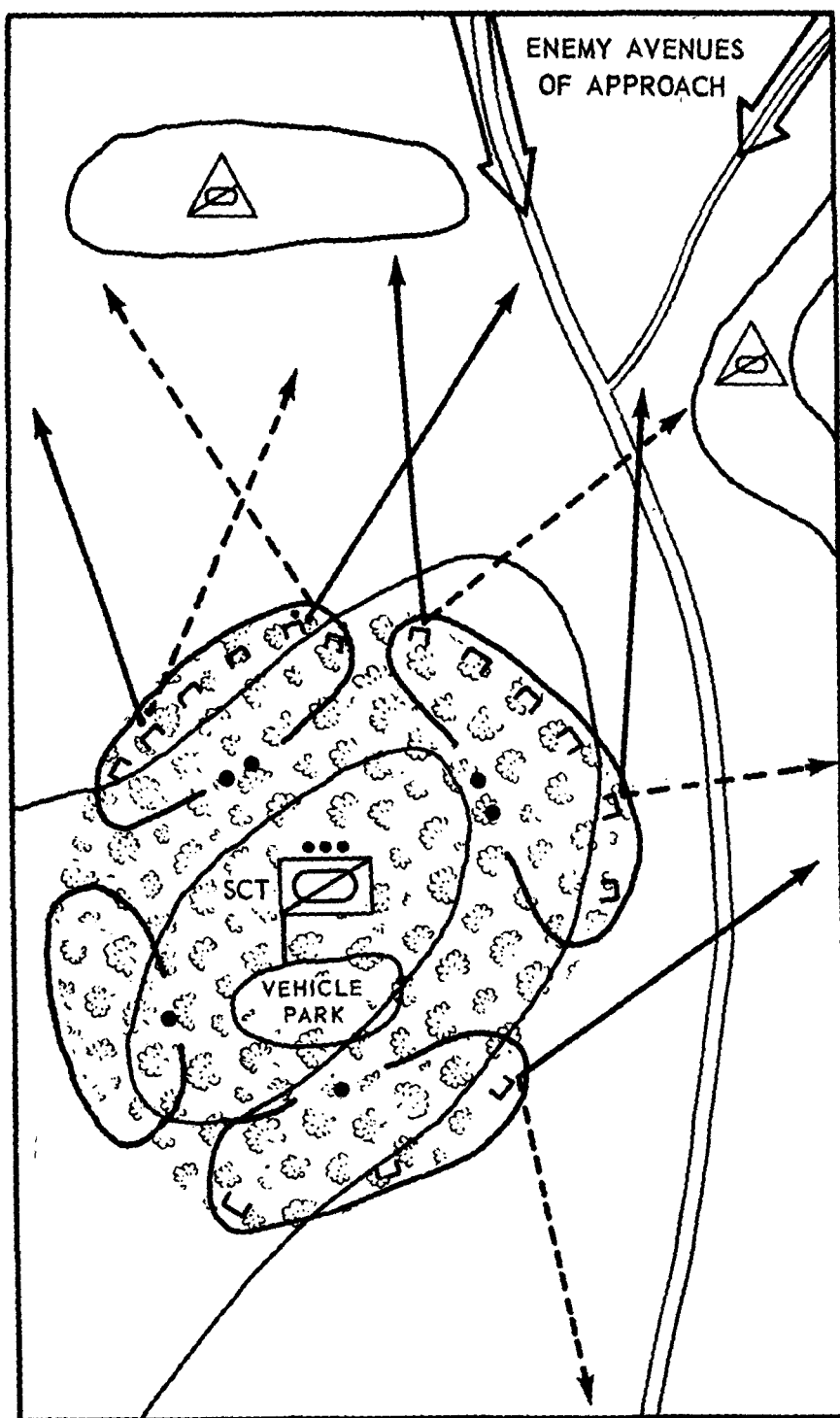


Figure 11. Scout platoon establishing a strongpoint.

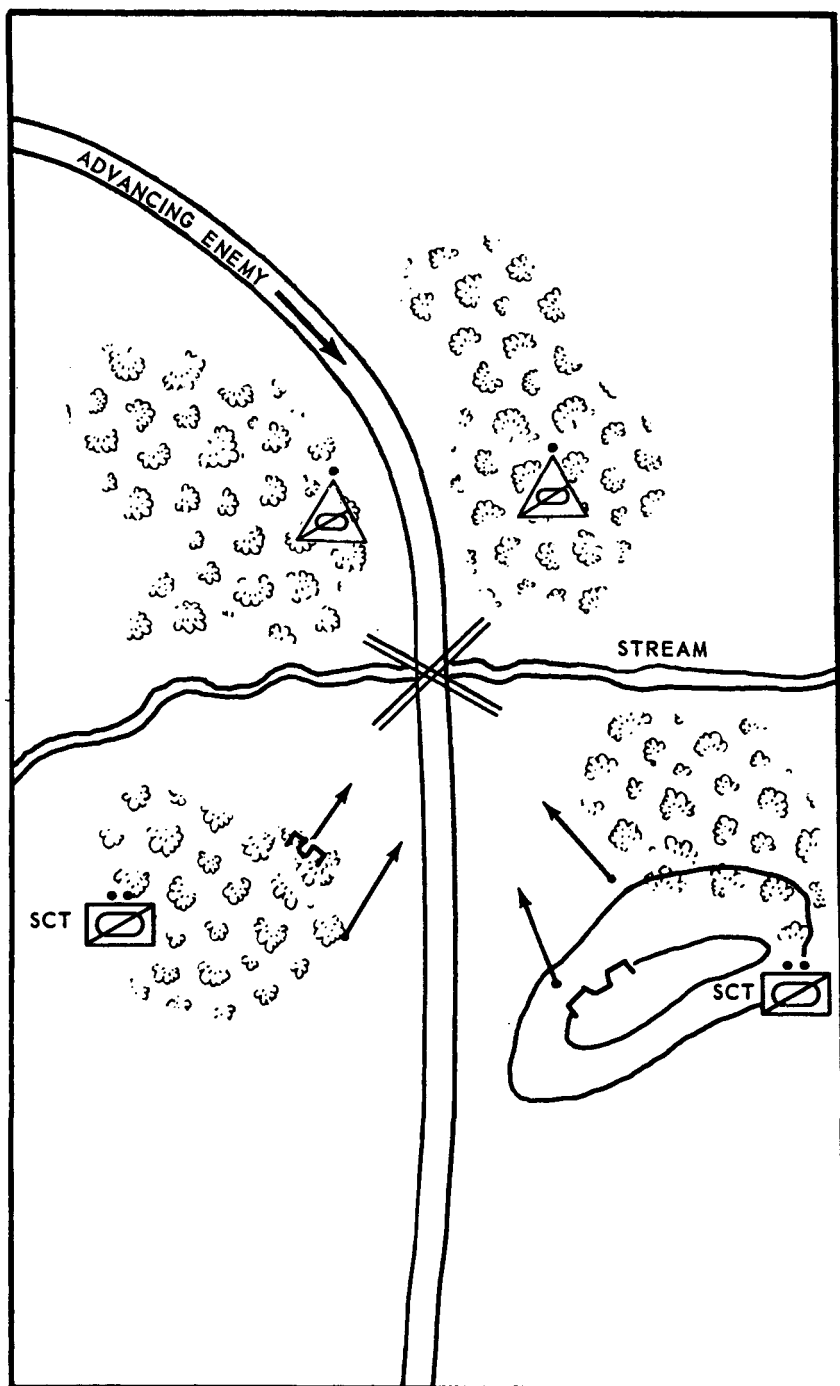


Figure 12. Scout platoon establishing a roadblock.

## 49. Blocking Positions

The scout platoon may establish a blocking position in carrying out various security missions. A blocking position is organized to deny the enemy access to a given area or to prevent his further advance in a given direction. A blocking position may consist of a roadblock or a platoon defensive position covering a specific enemy avenue of approach.

*a. Roadblocks.* When the movement of vehicles is largely restricted to roads, a roadblock may materially assist the scout platoon to accomplish an assigned mission. Before establishing a roadblock, the platoon leader should consider all means to obstruct, delay, and canalize enemy movement. Natural obstacles, mines, boobytraps, wire, demolitions, and logs are the normal means used. In addition, the element of surprise and the platoon's ability to cover an obstacle by fire must be considered. The roadblock should incorporate obstacles covered by fire; however, if time or the lack of obstacle material prevents the platoon from physically placing an obstacle on the road, it establishes the roadblock by fire alone. Having selected the point or area along a road where the roadblock will be established, the platoon leader must select positions for each element of the platoon and allot tasks for preparing the position and developing the obstacle.

- (1) One scout section is normally employed to secure the flanks and to assist in covering possible bypasses which the enemy may use to avoid the obstacle.
- (2) The remaining scout sections are normally employed to cover the roadblock by fire. Machineguns are normally positioned where the best fields of fire are available. Scouts with rifles cover areas not covered by machine-gun fire (fig. 12).

*b. Platoon Defensive Position.* See paragraph 46.

## Section X. SCOUT PLATOON IN RETROGRADE OPERATIONS

### 50. General

*a. Missions assigned to the scout platoon in retrograde operations include providing flank security for the battalion task force; maintaining contact with adjacent units; providing local security to the front of the delaying units; reconnoitering routes of withdrawal for the task force; reconnoitering possible delaying positions; and guiding the troops during the withdrawal to new positions.*

b. The scout platoon is not organized and equipped to conduct an independent delaying action. Normally, it will operate as part of the battalion task force and should be assigned missions that capitalize on its reconnaissance and security capabilities.

c. When the scout platoon is required to conduct a delaying action, it must make maximum use of its organic automatic weapons firepower, create obstacles, and use its mobility to delay and harass the enemy.

d. FM 17-1 covers the fundamentals of planning for and conducting delaying actions.

## **51. Scout Platoon in Delaying Action**

a. When performing as part of a battalion delaying force, the scout platoon is normally employed initially as a security force to the front to provide early warning. Once an enemy force is detected, the platoon maintains contact with it until relieved of the assigned mission. As the enemy approaches the initial delaying position established by the battalion, the scout platoon will usually move to the flanks of the delaying force and provide flank security while maintaining contact with the enemy. This is accomplished by moving parallel to the routes of withdrawal selected for use by the delaying forces.

b. It is important that scout elements do not withdraw faster than the delaying units. They must also remain in continuous radio communication with the delaying force. Forward scout squads do not withdraw unless they or another squad can continue to observe the advancing enemy. The technique used in movement to the rear consists of either successive or alternate bounds to previously reconnoitered positions.

c. Scout units may be required to reconnoiter and secure routes of withdrawal for the delaying forces. This type of mission is usually accomplished by patrolling the assigned route. The platoon can successfully reconnoiter up to three routes in this manner, with one scout section operating on each route.

d. Scout sections may be attached to company teams in the conduct of a delaying action. This employment of scout sections is particularly effective when the battalion task force is operating on an extremely wide front, and centralized control of scout elements is difficult.

## **52. Scout Platoon in Reserve, Delaying Action**

In a delaying action, all or part of the scout platoon may be employed as part of the reserve. The scout platoon may act as a

security force for the reserve or it may assist in movement of the reserve to blocking positions.

## **Section XI. SCOUT PLATOON, ADDITIONAL MISSIONS**

### **53. General**

The scout platoon is frequently employed in performing liaison, participating in the quartering party, providing contact parties, and acting as guides.

### **54. Liaison**

Liaison must be maintained with units on the left and right so that their location and activities may be known. All personnel must be trained to perform liaison because frequently a section or squad will perform an independent liaison mission. Information that the scout platoon may be required to deliver or receive includes:

- a.* Location and identification of friendly units.
- b.* Location and time of enemy contact.
- c.* Trace of front line units.
- d.* Operation plans.
- e.* Chemical, biological, and radiological monitoring and survey data.
- f.* Report of enemy nuclear attacks.

### **55. Scout Platoon in Quartering Party**

The scout platoon or its elements may be used in the battalion quartering party. The duties of the quartering party are discussed in FM 17-1.

### **56. Scout Platoon Providing Contact Parties**

Elements of the scout platoon may be used as contact parties. Before attempting to make contact with another unit, the scout section or squad leader must determine the location of the contact point or alternate contact point, when the contact is to be made, and what is to be accomplished on contact. He must also determine the radio frequency of the unit to be contacted, action desired if contact is not made, and method of reporting contact or information received at the contact. If contact is to be made at a specific point by a scout section, one squad may move directly to the designated point while the other squad overwatches from a good point of observation and provide security.

## **57. Scout Platoon Providing Guides During Movement**

*a.* The scout platoon may be used to provide guides during a march. The platoon leader supervises the placing of direction or route markers, ensures the accomplishment of liaison with the unit to be guided, ascertains the rate of march, and identifies the beginning and end of the route of march.

*b.* When time permits, the scout platoon leader should reconnoiter the route. If a passage of lines is to be effected, scouts may assist in providing guides. The platoon leader should coordinate with the unit through which the passage will take place, become familiar with the tactical situation, location of friendly troops, obstacles in the area, and with the terrain in general.

## **Section XII. SCOUT PLATOON, SPECIAL OPERATIONS**

### **58. General**

This section covers airmobile operations, damage control, and chemical, biological, and radiological (CBR) monitoring and survey. Additional information on these and other special operations is contained in chapter 23 of this manual, in FM 17-1, FM 17-50 and FM 21-40.

### **59. Airmobile Operations**

*a.* The scout platoon is capable of being air transported during combat operations. This is frequently done when airmobile operations are faster or when terrain or enemy activity prevents ground movement. All the organic equipment of the platoon, including vehicles, is air transportable in helicopters.

*b.* The platoon leader must be familiar with the troop and cargo carrying capabilities of helicopters organic to the division aviation company. Scout personnel must be familiar with the techniques applicable to loading and landing phases of helicopter operations.

*c.* Upon receipt of a mission which involves helicopter transport, the scout platoon leader will be informed by battalion headquarters of the number and type of aircraft available to support the operation. In some operations, shuttling may be required. In this case, the platoon leader must arrange his loads to phase the personnel and equipment into the area of operations in the sequence of their need.

*d.* Scout personnel must have a thorough knowledge of the following:

- (1) Selection and marking of landing sites.



- (2) Arm and hand signals to guide aircraft.
- (3) Method of loading and lashing equipment in helicopters.
- (4) Communication procedures for contacting helicopters.
- (5) Emergency procedures during takeoff, flight, and landing.

## 60. Damage Control Operations

The scout platoon or portions thereof may be required to assist in damage control operations in the battalion area. During damage control operations, the scout platoon may be required to perform chemical, biological, and radiological (CBR) monitoring or be assigned the mission of conducting CBR survey; assist in restoring communication to affected units, control traffic, or otherwise assist as directed by the control and assessment team (CAT) or heavy rescue team.

## 61. Chemical, Biological, and Radiological Monitoring and Survey Operations

*a. General.* The scout platoon will frequently be required to perform CBR monitoring or be assigned the mission of conducting CBR survey operations.

*b. CBR Monitoring.* CBR monitoring is a function frequently performed by the scout platoon. It is performed in addition to the primary mission of the platoon. Monitoring is conducted either on a periodic or continuing basis. When moving, it is desirable to conduct continuous monitoring. When occupying an area or position, periodic monitoring will usually suffice.

*c. CBR Survey.* When the scout platoon is assigned a survey mission, the size and composition of the survey team is based on a consideration of the number of personnel in the platoon that can be diverted from the primary mission; the area to be surveyed; equipment on hand; the road net in the area; and the specific information desired. Protection must be afforded survey personnel. The cumulative dose of radiation must also be considered. The platoon headquarters will normally act as the control party for survey parties organized within the platoon.

*d. Reporting CBR Data.* Information gathered in CBR monitoring operations should be forwarded through command channels. Survey information may be reported direct to the CBRs or RADC, or through command channels.

## CHAPTER 4

### SCOUT SECTION, COMBAT COMMAND HEADQUARTERS AND HEADQUARTERS COMPANY

---

#### Section I. GENERAL

##### 62. General

*a.* This chapter covers the organization and techniques for employment of the scout section organic to the combat command headquarters and headquarters company, armored division.

*b.* The organization and employment of this scout section are similar to those of the scout section of the scout platoon of the armor battalion or armored infantry battalion discussed in chapter 3. Differences are stressed in this chapter.

##### 63. Mission of the Scout Section

The scout section is organized and equipped to perform reconnaissance, provide security, and assist in movement, control, and liaison. It may be used to conduct chemical, biological, and radiological monitoring and survey for the combat command headquarters and headquarters company.

#### Section II. SCOUT SECTION ORGANIZATION

##### 64. General

The scout section of the combat command headquarters and headquarters company, armored division, consists of a section headquarters and two identical scout squads (fig. 13).

##### 65. Section Headquarters

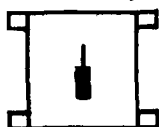
The scout section headquarters consists of a section leader, scout driver, and observer. A  $\frac{1}{4}$ -ton truck equipped with a vehicular-mounted radio provides transportation for the section headquarters.

##### 66. Scout Squad

The scout squad consists of six men: squad leader, assistant squad leader, two scout drivers, and two observers. Transporta-

# SCOUT SECTION HEADQUARTERS

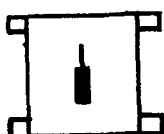
AN/VRC-8



SEC LDR  
SCT DVR  
SCT OBSR

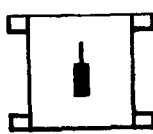
## FIRST SCOUT SQUAD

AN/VRC-8



SQD LDR  
SCT DVR  
SCT OBSR

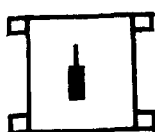
AN/PRC-8



ASST SQD LDR  
SCT DVR  
SCT OBSR

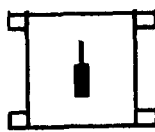
## SECOND SCOUT SQUAD

AN/VRC-8



SQD LDR  
SCT DVR  
SCT OBSR

AN/PRC-8



ASST SQD LDR  
SCT DVR  
SCT OBSR

Figure 13. Manning chart for scout section, combat command headquarters and headquarters company.

tion is provided by two  $\frac{1}{4}$ -ton trucks. Communication equipment in the section includes a radio mounted in the squad leader's vehicle and a portable radio. A light machinegun is mounted in each  $\frac{1}{4}$ -ton truck.

### **Section III. EMPLOYMENT OF THE SCOUT SECTION**

#### **67. General**

The scout section of the combat command headquarters and headquarters company is usually employed as a unit. The mission assigned to the section may frequently require that the scout squads be separated; however, it is desirable that the squads operate under control of the section leader as much as possible.

#### **68. Techniques of Employment**

The section leader controls the activities of the section without the additional requirement of being a squad leader. This gives the section leader more freedom of action and facilitates control of the section. The techniques of employment to be used by the scout section are similar to those discussed for the scout platoon in chapter 3.

#### **69. Scout Section, Reconnaissance Missions**

a. The scout section performs limited reconnaissance for the combat command headquarters. Normal tasks include reconnoitering routes and areas to be used for the combat command command post.

b. For detailed guidance in performing reconnaissance missions, see paragraphs 33 through 36.

#### **70. Scout Section, Security Mission**

The scout section provides limited security for the combat command headquarters and headquarters company both on the move and in an assembly area. For details on the conduct of security missions, see paragraphs 37 through 41.

#### **71. Scout Section, Movement, Control, and Liaison Missions**

The scout section will frequently perform missions which assist in the movement and control of the combat command headquarters and headquarters company. Additionally, it may provide liaison with other units, and act as a contact party when required. For a detailed discussion, see paragraphs 53 through 57.

## **72. Additional Considerations in Employment of Scout Section**

*a.* The scout section may be transported by helicopter in accomplishing any assigned mission. See paragraph 59.

*b.* The scout section may participate in the following operations:

(1) Damage control. See paragraph 60.

(2) Chemical, biological, and radiological monitoring and survey operations. See paragraph 61.

# **PART THREE**

## **ARMORED CAVALRY PLATOON**

### **CHAPTER 5**

#### **GENERAL**

---

#### **Section I. GENERAL**

#### **73. Purpose and Scope**

Part three of this manual contains a discussion of the organization and techniques for employment of the armored cavalry platoon and its elements. The platoon is organic to the armored cavalry troop of the armored cavalry squadron in the armored division, infantry division, and armored cavalry regiment, and to the combat support company of the infantry battle group. The material covered in part three is applicable to all armored cavalry platoons.

#### **74. Missions of the Armored Cavalry Platoon**

The armored cavalry platoon performs reconnaissance, provides security, and conducts light combat missions for or as part of units to which assigned or attached. The platoon can assist in damage control operations and conduct CBR monitoring and survey operations. The armored cavalry platoon engages in whatever type of action is required to accomplish its assigned missions.

#### **Section II. ARMORED CAVALRY PLATOON ORGANIZATION**

#### **75. General**

The armored cavalry platoon consists of a platoon headquarters, scout section, tank section, rifle squad, and a support squad (fig. 14).

#### **76. Platoon Headquarters**

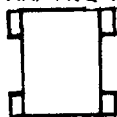
The platoon headquarters consists of the platoon leader and a scout driver, who rides in a 1/4-ton truck.

#### **77. Scout Section**

The scout section consists of two scout squads, each with six men. Each squad consists of a squad leader, assistant squad lead-

# ARMORED CAVALRY PLATOON HEADQUARTERS

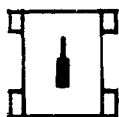
AN/VRQ-1



PLAT LDR  
SCT DVR

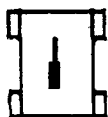
## SCOUT SECTION

AN/VRC-8



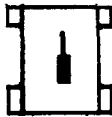
SEC LDR  
SCT DVR  
SCT OBSR

AN/PRC-8



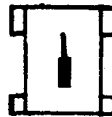
ASST SQD LDR  
SCT DVR  
SCT OBSR

AN/VRC-8



SQD LDR  
SCT DVR  
SCT OBSR

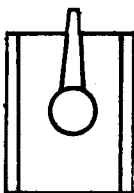
AN/PRC-8



ASST SQD LDR  
SCT DVR  
SCT OBSR

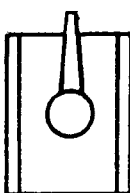
## TANK SECTION

AN/GRC-3



PLAT SGT  
GNR  
TK DVR  
LOADER

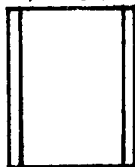
AN/GRC-4



TK COMD  
GNR  
TK DVR  
LOADER

## RIFLE SQUAD

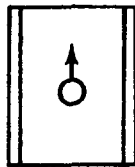
AN/VRC-13  
AN/PRC-8



SQD LDR  
2 TEAM LDR  
2 AUTO RIFLEMEN  
APC DVR  
3 SR RIFLEMEN  
3 RIFLEMAN

## SUPPORT SQUAD

AN/VRC-13



SQD LDR  
MORT CARR DVR  
MORT GNR  
ASST MORT GNR

NOTE: The armored cavalry platoon of the infantry division cavalry squadron has infantry band radios.

Figure 14. Manning chart for armored cavalry platoon.

er, two scout observers, and two drivers. Each squad is mounted in two 1/4-ton trucks, a total of four for the section. A light machinegun mounted in each 1/4-ton truck provides the bulk of the section's firepower. The section leader also commands the first squad.

#### **78. Tank Section**

The tank section of the platoon has two light tanks. Each crew consists of a tank commander, gunner, driver, and loader. The platoon sergeant usually commands one tank and is the section leader.

#### **79. Rifle Squad**

The rifle squad consists of a squad leader, two fire teams, and a driver. Each fire team consists of a team leader, an automatic rifleman, and three riflemen. The squad has a ground-mount machinegun and a rocket launcher. Transportation is provided by an armored personnel carrier.

#### **80. Support Squad**

The support squad consists of a squad leader, gunner, assistant gunner, and driver. The support weapon is mounted in an armored mortar carrier.

### **Section III. DUTIES OF KEY PERSONNEL**

#### **81. General**

The platoon leader and noncommissioned officers in the armored cavalry platoon must be capable of employing the personnel and equipment for which they are responsible. Within the platoon, each leader must be able to react rapidly and with initiative in any situation. He must have a knowledge of combined arms tactics and be able to employ his unit alone or as part of a larger force.

#### **82. Duties of Platoon Leader**

The platoon leader is responsible to the troop commander for the discipline, training, combat readiness, and control of his platoon, and its maintenance and equipment. The platoon leader must know the capabilities and limitations of the personnel and equipment in the platoon, and he must be thoroughly familiar with all aspects of command and leadership as discussed in FM 17-1.

#### **83. Duties of Platoon Sergeant**

The platoon sergeant is second in command of the platoon. He



commands elements of the platoon as directed by the platoon leader and assumes command of the platoon in the absence of the platoon leader. Normally, when the platoon leader is mounted in the 1/4-ton truck of the platoon headquarters, the platoon sergeant will command the tank section. When the platoon leader uses a tank, the platoon sergeant may use the platoon leader's 1/4-ton truck. The platoon sergeant assists the platoon leader in maintaining discipline, in training, and in maintaining control of the platoon. He assists also in matters pertaining to maintenance of equipment, supply, and other administrative matters of the platoon.

#### **84. Duties of Section and Squad Leaders**

Section and squad leaders are responsible to the platoon leader for the training, discipline, tactical employment, and control of their units. They closely supervise the maintenance and efficient operation of all vehicles and equipment which are organic to their elements. Each section or squad leader must be thoroughly familiar with the operational techniques of his own and other elements of the platoon. This is essential to ensure effective combined arms actions within the platoon.

#### **85. Duties of Tank Commanders**

The tank commanders direct the movement, firing, maintenance, and resupply of their tanks. They also supervise first aid and evacuation of wounded crew members.

### **Section IV. EMPLOYMENT, GENERAL**

#### **86. General**

The armored cavalry platoon is organized as a combined arms team. Each element of the platoon — scout section, tank section, rifle squad, and support squad—contributes to the overall success of the platoon. While capable of being divided and used separately by sections or squads, the platoon should be employed as a unit and given suitable missions for a combined arms team. This section discusses the employment of the various elements of the platoon.

#### **87. Scout Section**

The scout section performs reconnaissance, provides security, performs pioneer and demolition work, conducts chemical, biological, and radiological monitoring and survey operations, and performs special duties, such as messenger service, traffic control,

liaison, and quartering. Normally, the scout section is employed as a section. Additional information on scout section employment is contained in chapter 3.

## **88. Tank Section**

The tank section engages in offensive, defensive, retrograde, reconnaissance, and security missions as part of the platoon. It contains the bulk of the combat power available to the armored cavalry platoon and should be used in a manner that takes advantage of its firepower, mobility, and shock action. The tanks are employed as a section in all operations to ensure mutual support. The section normally functions as part of the platoon tank-infantry team.

## **89. Rifle Squad**

The rifle squad performs normal infantry combat missions, usually as part of the tank-infantry team. The squad also frequently performs missions normally associated with the scout section, such as reconnaissance, security, and pioneer and demolition work.

## **90. Support Squad**

The support squad furnishes indirect-fire support for the platoon. The squad normally operates under platoon control when the troop is operating on a broad front, or when the platoon mission requires the immediate availability of the support squad. On many occasions, however, the support squad will be massed with the other support squads under troop control.

## CHAPTER 6

### RECONNAISSANCE AND SECURITY MISSIONS, ARMORED CAVALRY PLATOON

---

#### Section I. PLATOON IN RECONNAISSANCE MISSIONS

##### 91. General

*a.* In executing reconnaissance missions, the armored cavalry platoon obtains information by stealth, observation, and infiltration, whenever possible; however, it will fight when necessary to gain information of the enemy and area of operations. When required to fight for information, the platoon conducts offensive action as described in chapter 7.

*b.* The armored cavalry platoon must be prepared to perform reconnaissance missions in conjunction with supporting Army aircraft, including aerial surveillance elements.

*c.* Information of the enemy and terrain must be timely and accurate. A unit SOP should be developed and used to expedite reports.

*d.* An aggressive search for information of the enemy provides a great measure of security for the platoon. Individuals must be designated to observe to the front, flanks, and to the rear. Vehicular weapons must always be manned while on a reconnaissance mission. Lateral reconnaissance is performed as directed by the platoon leader. Proper distance and interval are maintained. Vehicles are dispersed and concealed at halts, and security is posted to prevent surprise. Air sentinels are designated to give timely warning of approaching hostile aircraft.

*e.* See FM 17-1 for the basic fundamentals and techniques of reconnaissance operations.

##### 92. Route Reconnaissance

*a. General.* In route reconnaissance, the platoon leader uses the designated route to move most of the platoon. The frontage covered by the platoon is determined by the key terrain which dominates the assigned route. The platoon is normally assigned, and can best reconnoiter, one route. In the conduct of a route reconnaissance mission, either scouts or tanks usually lead the formation (figs. 15 and 16).

- (1) The scout section will usually lead the formation when very little or no enemy action has been encountered and stealth is of primary importance. Scouts may also lead when fields of fire are short, terrain is favorable for enemy ambush of tanks, and natural obstacles are prevalent. Maximum use should be made of the scout section's capability for rapid, quiet movement.
- (2) The tank section will usually lead the formation, with scouts employed on the flanks, when the platoon is approaching a known enemy position or when it is necessary to ensure the uninterrupted advance of the platoon.
- (3) For the type of information sought in reconnaissance mission, see paragraph 34.

*b. Engineer Route Reconnaissance.* When a detailed route reconnaissance must be performed (to determine the condition of roads and bridges, or other engineer data), engineers may accompany the platoon. All members of the platoon must know how to conduct an engineer route reconnaissance as explained in FM 5-36.

*c. Movement During Reconnaissance.* The distance between vehicles varies with the terrain and the unit SOP. As far as possible, visual contact between succeeding elements should be maintained. The distance between elements must permit the platoon to move at maximum speed and, at the same time, minimize the possibility of involving the entire platoon in an ambush or trap, or exposing all elements to enemy fire simultaneously. Normally, the leading elements of the platoon (tanks and scouts) advance by bounds from one point of observation to another. Lead elements are covered by the elements which immediately follow, or by elements working on the flanks. Seldom will enemy contact be so remote that leading elements can move along the assigned route without advancing by bounds. Key terrain features on the flanks are normally reconnoitered by the scout section. The extent to which lateral roads are checked is directed by the platoon leader in conformance with the enemy situation, time available, and desired rate of advance.

*d. Action on Contact.* When enemy contact is made or an obstacle is encountered, the platoon reacts in the same manner as described in paragraph 34.

*e. Reporting.* The platoon leader remains in constant radio contact with the troop commander and keeps him fully informed of the progress of the platoon and on information acquired.

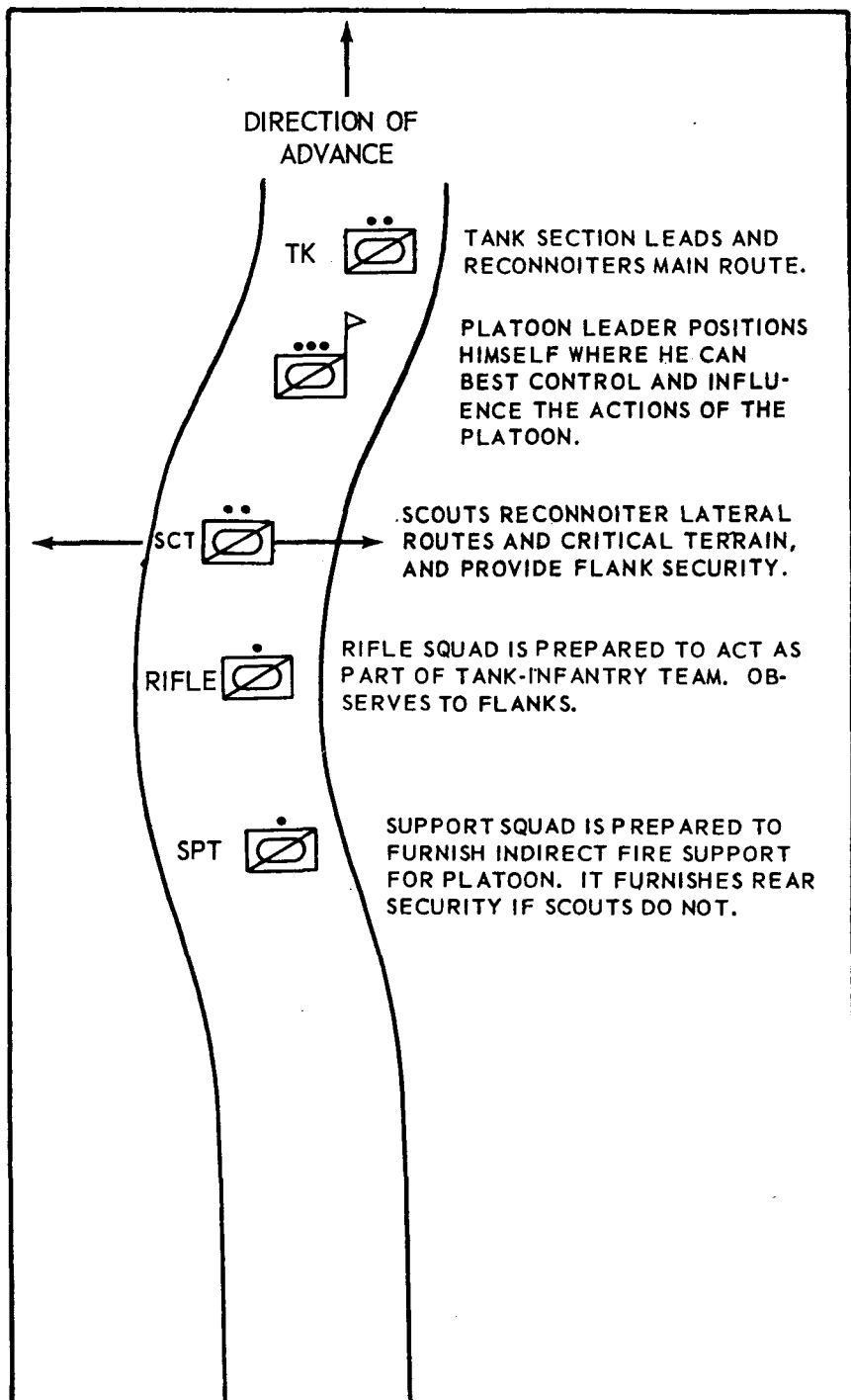


Figure 15. Armored cavalry platoon conducting route reconnaissance; tank section leading.

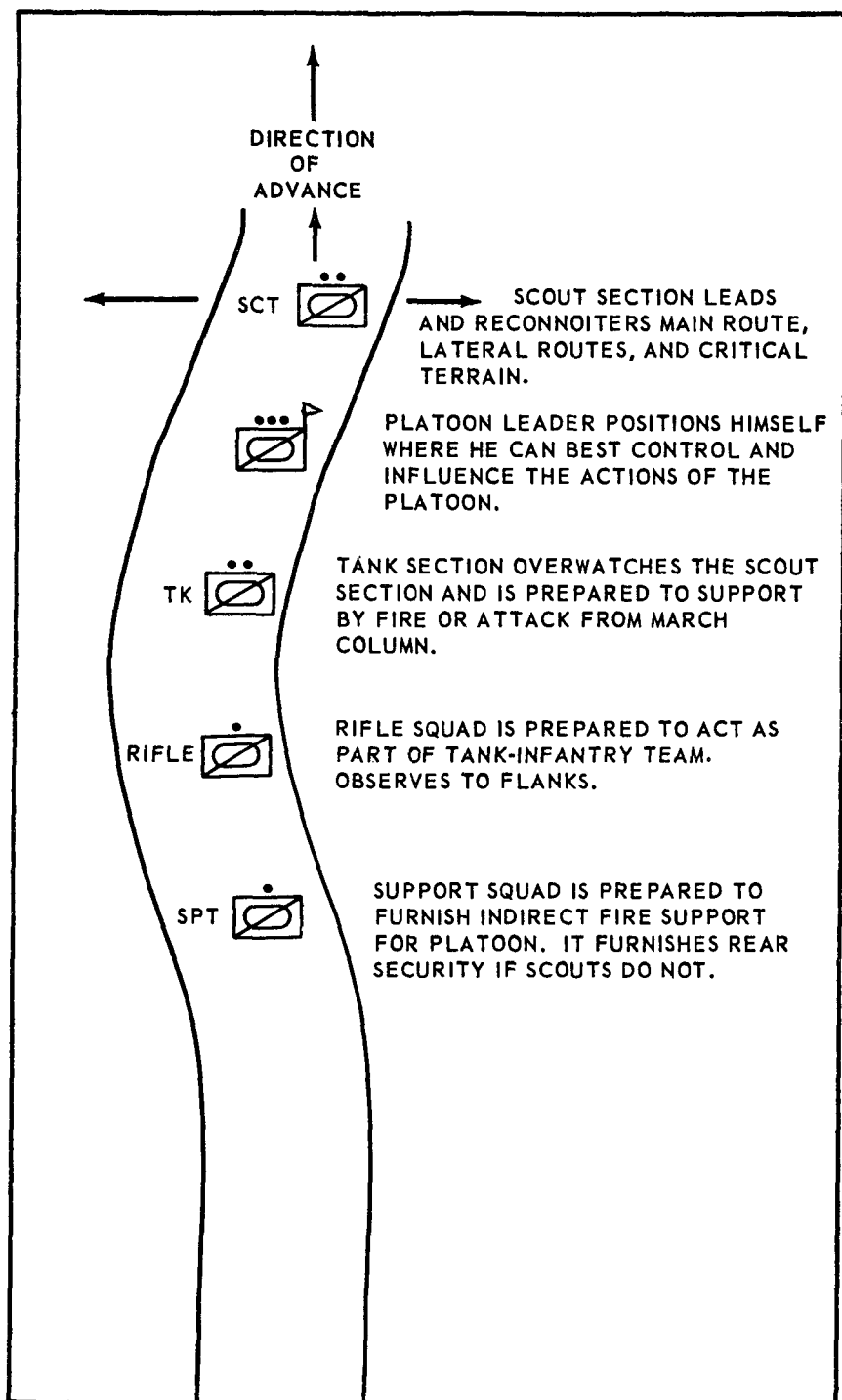


Figure 16. Armored cavalry platoon conducting route reconnaissance; scout section leading.

Within the platoon, each section and squad leader must also keep the platoon leader constantly informed of the situation.

### 93. Zone Reconnaissance

*a. General.* The armored cavalry platoon can most effectively perform zone reconnaissance within a zone containing only one major route. The bulk of the platoon advances in column on the best road, while scouts perform reconnaissance of other roads, trails, and terrain features within the zone. Factors determining the width of the platoon zone are the pattern of the road net, terrain features, anticipated enemy activity, type of information desired, availability of Army aircraft to support the platoon, and the time available for accomplishment of the mission. The platoon frontage is established by boundaries. Elements of the platoon advancing in column are positioned according to the principles stated for route reconnaissance (figs. 15 and 16).

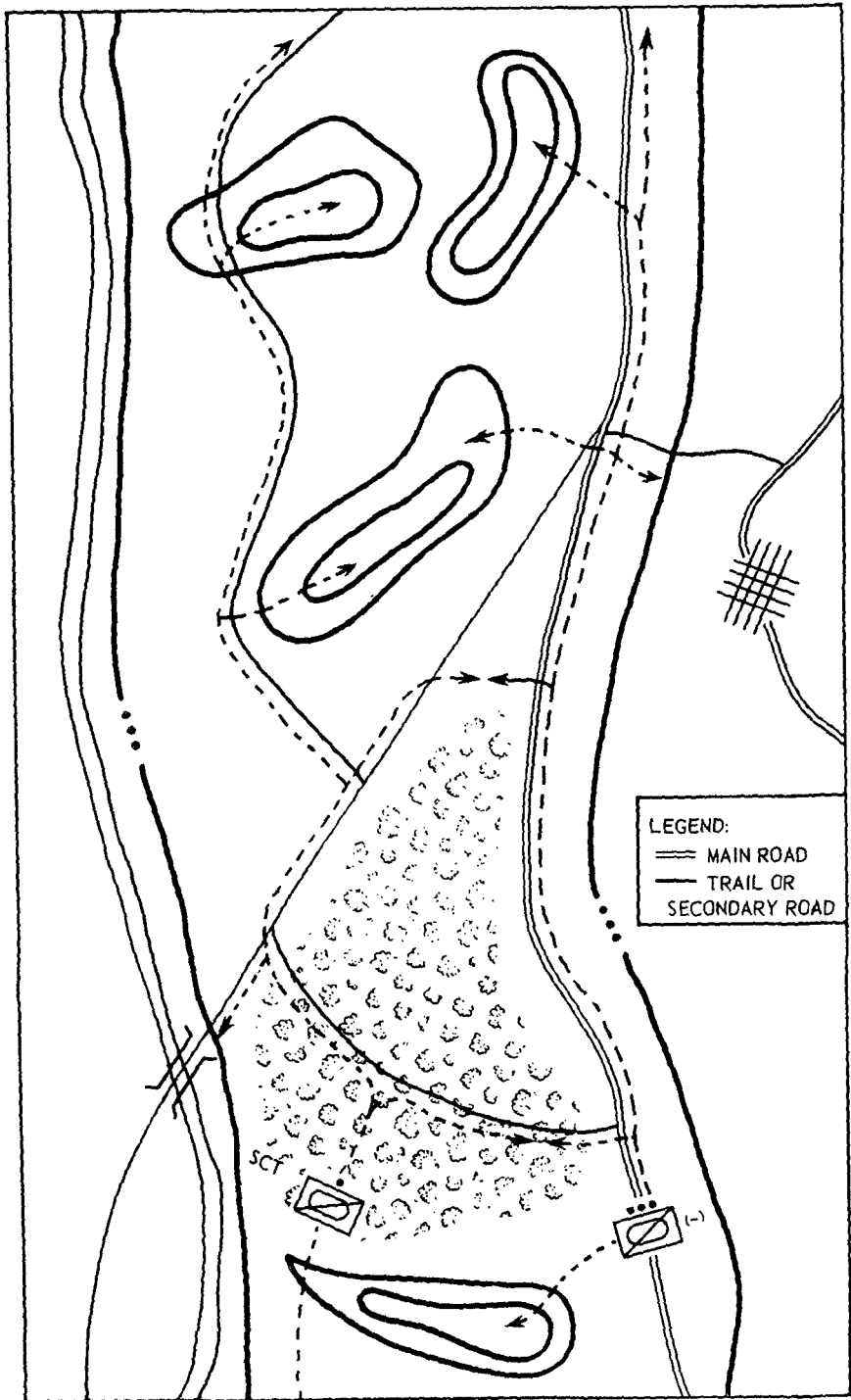
*b. Movement During Zone Reconnaissance.* Movement of the platoon on the main route in the zone is generally the same as for route reconnaissance. Forward movement is generally slower, because zone reconnaissance is more thorough and time consuming. Scout elements must be given time to reconnoiter to the designated boundaries and all key terrain in the platoon zone. Less important terrain features are reconnoitered as thoroughly as time permits or as the situation requires. During a zone reconnaissance, scout elements are frequently required to move on the flanks of the platoon main column as shown in figure 17.

*c. Action on Contact.* When contact with the enemy is made, the situation is normally developed in the same manner as in a route reconnaissance. However, if the platoon is primarily concerned with gathering information of enemy locations or finding suitable routes for advance within the zone, it may bypass small pockets of enemy resistance in order to continue with the mission.

*d. Reporting.* The troop commander must be kept fully informed of the situation by the platoon leader. Within the platoon, section and squad leaders must keep the platoon leader informed.

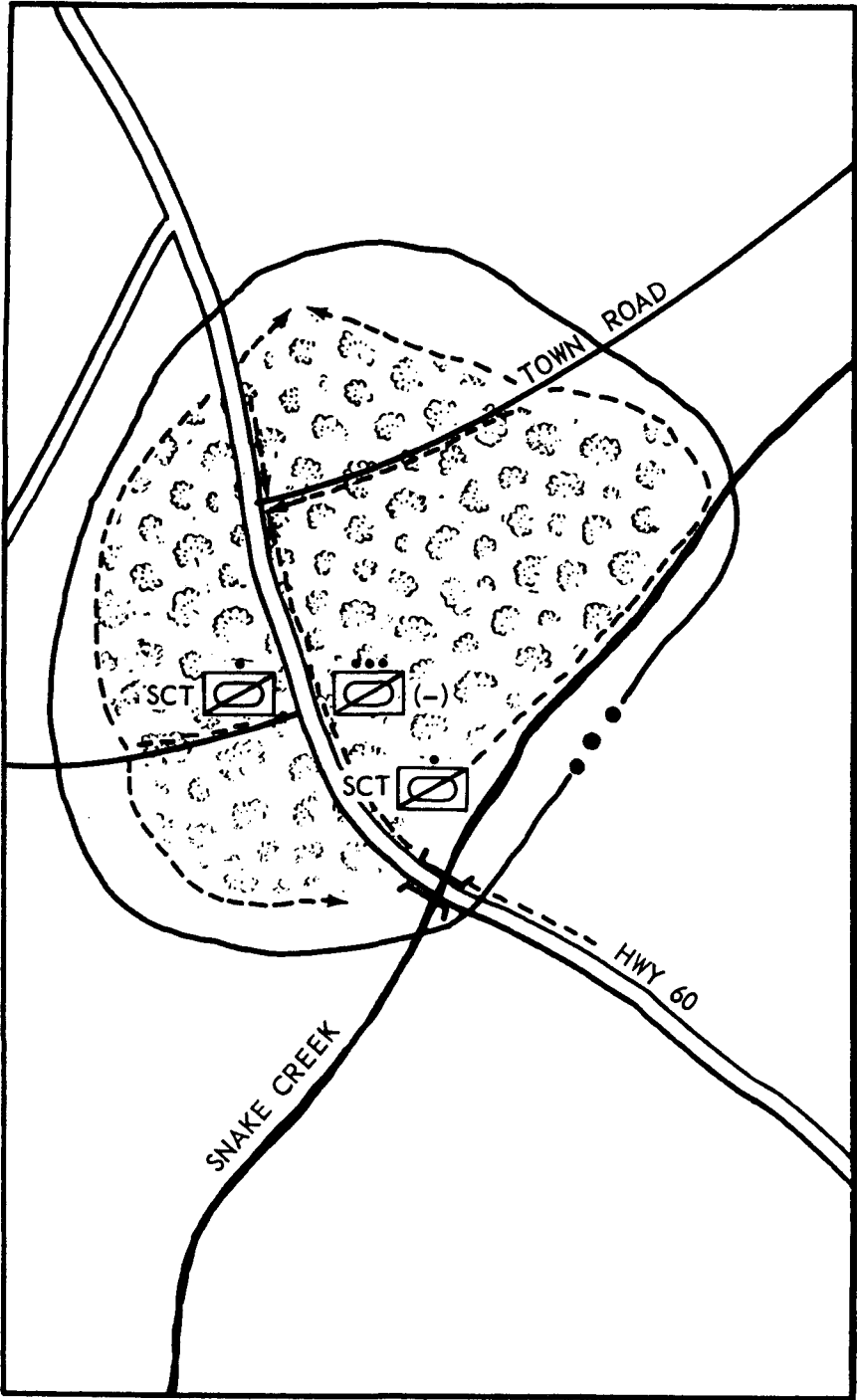
### 94. Area Reconnaissance

*a. General.* In the area reconnaissance, the armored cavalry platoon moves by the most direct route to the area to be reconnoitered. Any enemy opposition should be reported and bypassed. When the platoon has arrived at the designated area, it may perform reconnaissance in the same manner as for a zone reconnaissance or it may have scout elements move directly to one or more



*Figure 17. Armored cavalry platoon executing zone reconnaissance.*





*Figure 18. Armored cavalry platoon conducting area reconnaissance.*

preselected points of observation from which the entire area can be observed. These observation posts can be supplemented by mounted or dismounted patrols.

*b. Movement to the Area to be Reconnoitered.* In moving from the location where the mission was first assigned to the area to be reconnoitered, the platoon adopts a formation which will permit rapid, secure movement. This formation will usually parallel that for a route reconnaissance, with either the tanks or scouts leading.

*c. Movement During Reconnaissance.* The platoon leader plans the reconnaissance in detail to ensure that the area is systematically covered, particularly roads and trails, key terrain, and suspected enemy locations. If the area restricts vehicular movement, dismounted patrols from the scout section and rifle squad will normally reconnoiter the area (fig. 18).

## **95. Reconnaissance by Fire**

*a. General.* Reconnaissance by fire may be employed in an attempt to cause the enemy to disclose his presence by movement or by return fire. The armored cavalry platoon employs reconnaissance fire when time does not allow complete coverage of all terrain features, in areas in which the presence of enemy forces is suspected, or when secrecy is not a consideration.

*b. Selection of Weapons.* Weapons are selected to conduct reconnaissance by fire depending on the number, type, and size of target areas. Additional considerations are the range to the target area, weapons in position to fire, and the ability of other elements of the platoon to observe. Normally, machinegun fire is used to conduct reconnaissance by fire in preference to other types of fire. The main armament on tanks may be used in areas where enemy armored vehicles have been encountered or their presence is suspected. Small arms may also be employed at short ranges against small well defined targets. If the platoon does not desire to disclose its position, mortar fire can be employed.

## **96. Reconnaissance Operations Behind Enemy Lines**

Small armored cavalry elements may frequently be employed on reconnaissance missions in rear of enemy forces. Personnel of the armored cavalry platoon, particularly scouts and riflemen, should be trained in conduct of mounted and dismounted reconnaissance operations behind enemy forces. Further discussion is included in chapter 23.

## 97. CBR Monitoring and Survey Operations

The armored cavalry platoon is capable of conducting CBR monitoring and survey operations. Although the scout section will most frequently be employed for this purpose, all personnel in the platoon must be trained to conduct such operations. See chapter 23 for guidance on the conduct of CBR monitoring and survey operations.

## Section II. PLATOON IN SECURITY MISSIONS

### 98. General

a. Security includes all actions taken by a command to protect itself from hostile observation, annoyance, and surprise, and to maintain freedom of action. A unit performing a security mission must give adequate warning of hostile approach to allow the main body to take appropriate action. The security force will engage the enemy, and within its capability, delay or defeat the enemy. The distance that a security force operates from the main body varies according to the terrain, road net, strength of the security force, and the enemy situation. Security forces should operate along commanding terrain.

b. The types of security missions in which the armored cavalry platoon may be employed are advance guard, flank guard, rear guard, screening force, rear area security, and covering force. Normally the platoon will participate in these missions as part of a larger force.

c. See FM 17-1 for a detailed discussion of fundamentals and techniques applicable to security operations.

### 99. Platoon as Advance Guard

a. When the armored cavalry platoon operates as an advance guard, it employs a formation similar to the formation used in performing route reconnaissance. The tank section and rifle squad advance in column until contact is made, while the scouts either perform flank security or lead the column.

b. The rate of march of the main body and the distance between the platoon and the main body are prescribed by the main body commander. The leading element of the platoon normally moves by bounds. When the enemy is encountered, the platoon leader should immediately deploy the platoon, report the enemy contact to higher headquarters, develop the situation, and select a course of action. The platoon attacks and destroys the enemy force within its capability. The platoon leader must keep the troop commander informed of the situation throughout the action.

## 100. Platoon as Flank Guard

a. The platoon may expect to perform flank guard missions more frequently than other types of security missions. It will usually perform a flank guard mission as part of a larger flank guard force; however, it may be required to act alone as a flank guard for the troop or squadron.

b. A platoon will provide flank security by occupying a series of blocking positions that dominate likely avenues of enemy approach into the flank of the main body. The platoon normally governs its movement on the advance of the main body; however, it may move at the direction of the main body commander. The platoon can effectively occupy only one blocking position at a time. Additional flank coverage can be obtained by establishing observation posts, patrolling, and coordinating with Army aircraft in the area. If the advance of the main body is against light resistance and is characterized by frequent halts of short duration, the platoon will normally move by bounds, from one blocking position to another, along its selected route. If the advance of the main body is uninterrupted, then the platoon may move continuously along its assigned route, with scouts checking key terrain on the exposed flank.

## 101. Platoon as Rear Guard

a. *Platoon as Rear Guard for Advancing Force.* The platoon may act as rear guard for an advancing troop or squadron. When the main body is advancing, the platoon, as rear guard, detects and delays enemy forces attacking the rear of the main body, protects the trains, and collects stragglers. The platoon follows the main body at a distance prescribed by the main body commander and usually moves on the same route of advance. The scout section is best used on the flanks to detect enemy forces which attempt to move between the rear guard and the main body.

b. *Platoon as a Rear Guard for a Withdrawing Force.* When the platoon provides rear guard for a withdrawing force, it employs delaying action techniques (ch. 9). The rate of movement is based on that of the main body or on prearranged plans. The platoon executes the rear guard mission by moving along the route over which the main body has moved, keeping itself between the main body and the enemy. The platoon leader selects a series of delaying positions along the route and withdraws by bounds from one position to another. The area to the flanks must be kept under constant observation by the scouts and available Army aircraft to prevent the rear guard platoon from being bypassed by the enemy. The platoon leader maintains communication with the

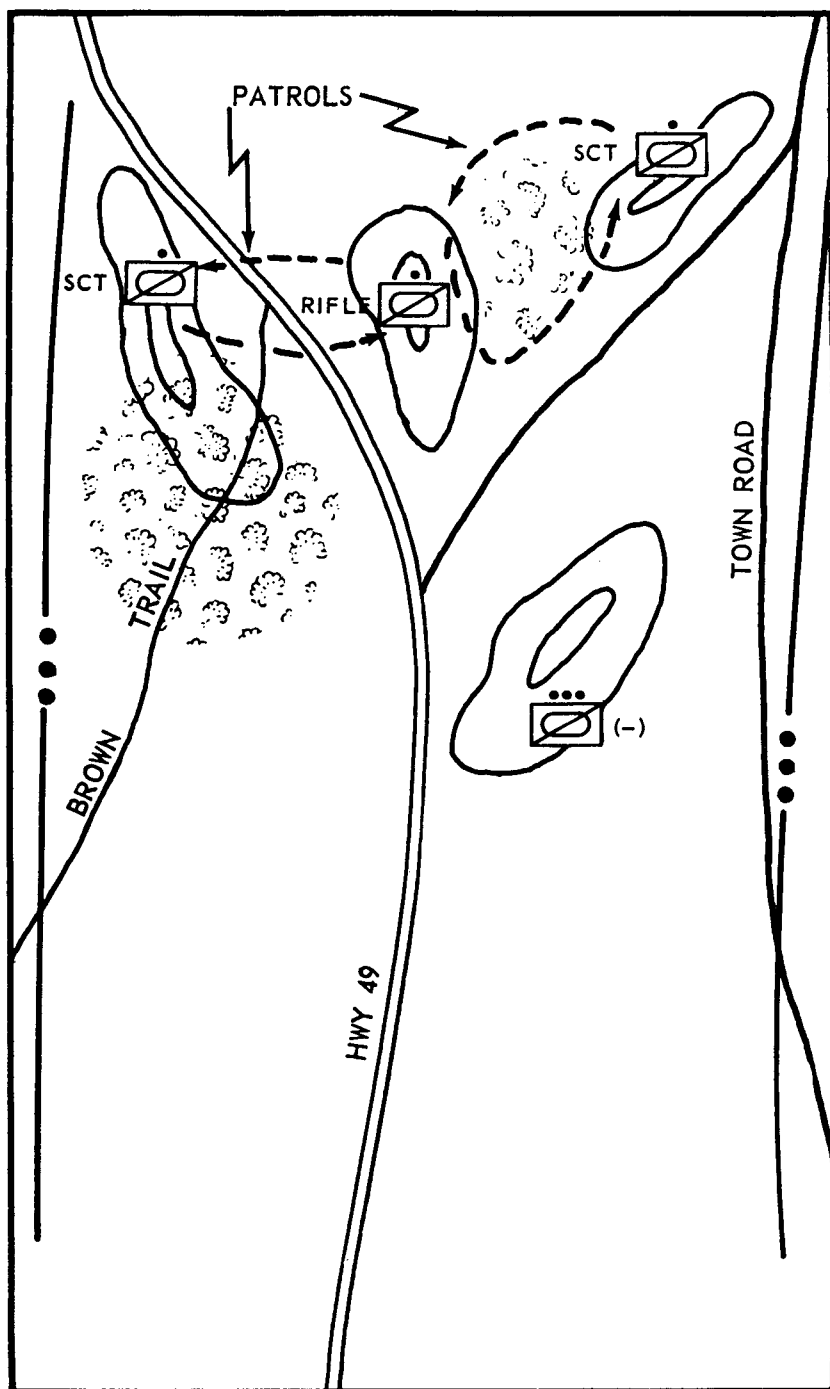


Figure 19. Armored cavalry platoon employed as a screening force.

main body to ensure that his movement is in consonance with that of the main body and to keep the main body commander informed of the situation. The platoon normally remains one delaying position behind the main body.

## 102. Platoon as Screening Force

*a. General.* The platoon may be used as a screening force when an extended frontage cannot otherwise be secured. When assigned this type of mission, the platoon normally protects an area or a body of troops from surprise by observing and reporting enemy activity. Within its capability, it destroys small enemy forces that enter the screen.

*b. Planning and Conduct.* The platoon leader establishes a series of observation posts with the scouts and riflemen covering the platoon sector. He employs patrols to cover the areas between observation posts. Normally, the tank section is either held in a central location, or positioned to block a likely avenue of enemy armor approach into the platoon sector. The tanks support the observation posts by fire and assist in their withdrawal as required. Normally, the support squad is also centrally located, where it can provide indirect fire support to the observation posts. If helicopters are available, personnel may be airlifted to man observation posts or to occupy key terrain features. The platoon accomplishes its mission by observing, reporting, and maintaining contact with enemy forces. The platoon leader moves his observation posts as required to maintain contact. Figure 19 illustrates a typical platoon disposition for a screening mission.

## 103. Platoon as Rear Area Security Force

*a. General.* The platoon may be assigned the mission of protecting rear area units and installations and routes of communication.

*b. Rear Area Units and Installations.* Normally, the platoon accomplishes this type of mission by patrolling and establishing observation posts that cover approaches to the unit or installation. The technique employed is similar to a screening force mission (par. 102).

*c. Routes of Communication.* The platoon may be given the mission of protecting a supply route or escorting the trains of a larger unit. The platoon may secure a supply route by patrolling as a unit or by establishing observation posts along the route, using scout elements, and patrolling the route with the remainder of the platoon. When escorting trains, the platoon may travel at the head of the column, or elements may be placed throughout the column.

## CHAPTER 7

### OFFENSIVE OPERATIONS, ARMORED CAVALRY PLATOON

---

#### 104. General

*a.* The armored cavalry platoon may be required to attack to accomplish its assigned mission. It may attack as part of a troop or independently. The attack may be planned and coordinated or it may take the form of an attack from march column.

*b.* See FM 17-1 for additional information on the fundamentals of attack, techniques of employing tanks and infantry, control measures, and other basic considerations of offensive action.

#### 105. Preparation for a Coordinated Attack

*a.* Before the platoon leader can make his plan of attack, he must complete a mental estimate of the situation. He must analyze the mission, enemy situation, terrain and weather, and troops available. He must consider, evaluate, and compare the courses of action open to him and then decide on the course of action which is most likely to succeed. For a discussion of the estimate of the situation, see FM 17-1.

*b.* Whether the platoon attacks alone or as part of the troop, it is important that the platoon leader make both a map and ground reconnaissance of the area of operations. By so doing, he is better able to make a valid estimate of the situation.

#### 106. Control Measures

To control his platoon in the attack, the platoon leader uses certain control measures, the type and number of which depend on the mission. In the planning stage, the platoon will normally be assigned an objective by the troop commander. This objective is a control measure in itself and all efforts of the platoon are directed toward its capture. Other control measures that may be used are the attack position; line of departure; axis, zone, or route of advance; and check points.

#### 107. Planning for a Coordinated Attack

*a.* The platoon plan of attack includes the plan of maneuver and the fire support plan. Prior to completing his plan of attack,

the platoon leader conducts a reconnaissance and completes his estimate of the situation. During the reconnaissance, the scout section may assist the platoon leader. The platoon plan of attack is characterized by teamwork and coordination between elements of the platoon and makes effective use of available supporting fires. The plan must be simple, yet it must contain the following essential details.

- (1) The composition and location of the base of fire, targets to be fired on, and control measures to lift or shift fires.
- (2) The composition of the maneuvering force, and its method and direction of advance.
- (3) Security during the attack, actions on the objective, and provisions for resuming the advance.

b. When the platoon is participating in a troop attack, the entire platoon may be employed in the base of fire or as part of the troop maneuvering force.

#### **108. Composition of the Maneuvering Force in a Platoon Attack**

a. The maneuvering force should contain the maximum available combat power. It should seek to strike the enemy force on the flanks or in the rear. In a mounted attack the armored cavalry platoon normally uses the tank section and armored infantry squad in the maneuvering force. Scout elements may accompany the maneuvering force to provide flank security and to assist in the movement of the force by selecting covered or concealed routes. If a dismounted attack is required, the maneuvering force may consist only of scouts and the rifle squad. Figure 20 illustrates the composition of several typical platoon maneuvering forces.

b. Normally the platoon leader accompanies the maneuvering force.

#### **109. Composition of the Platoon Base of Fire**

a. The base of fire should consist of the minimum force necessary to pin the enemy to the ground and neutralize his weapons. In the platoon, it normally consists of the support squad. The base of fire may also include tanks, riflemen, or scout elements. Tanks are placed in the base of fire only if the terrain or enemy dispositions prevent their employment in the maneuvering force. Riflemen and scouts are employed in the base of fire when the composition of the enemy force is such that automatic weapons can provide effective suppressive fire.

b. Elements of the platoon employed in the base of fire are usually controlled by the platoon sergeant.



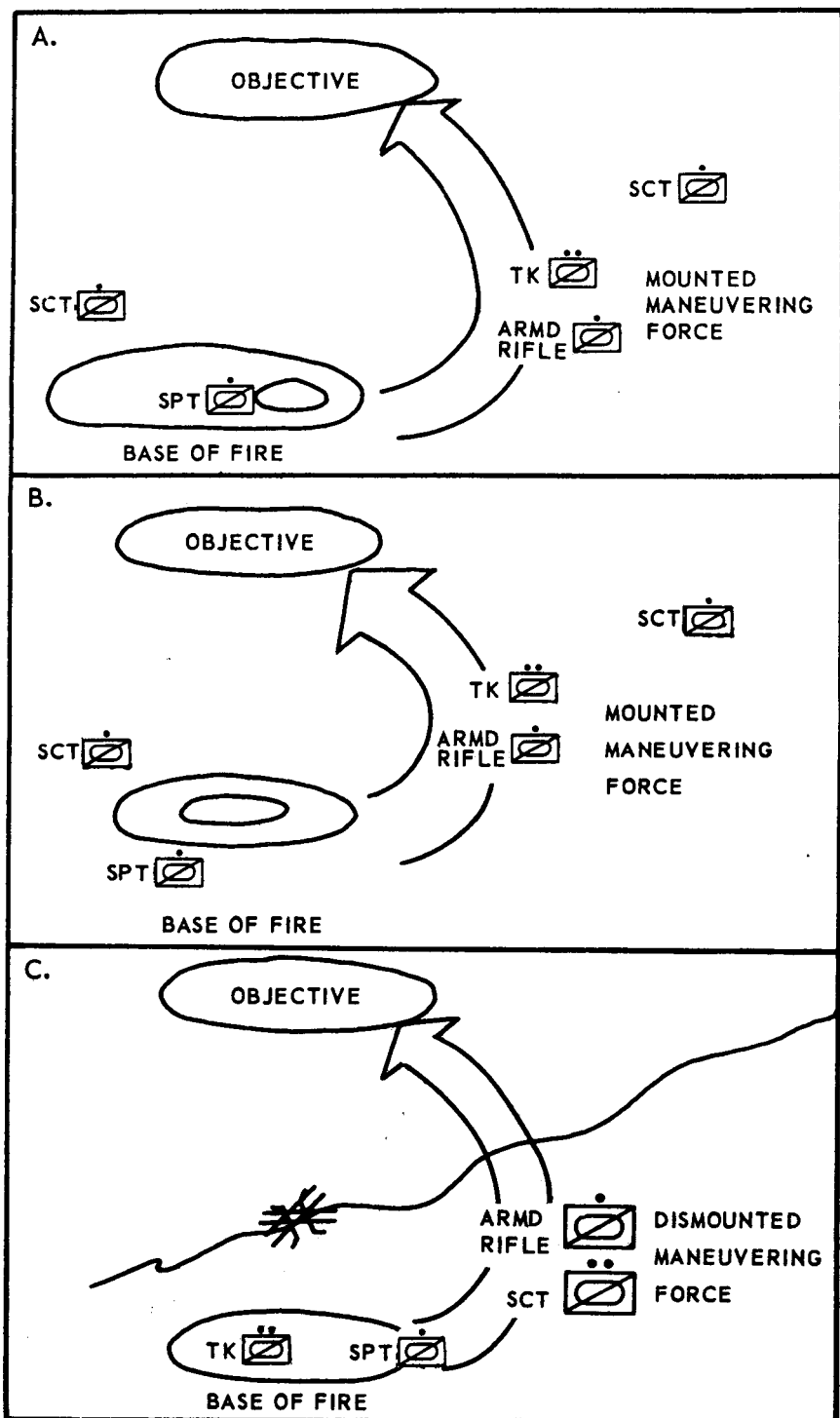


Figure 20. Maneuvering forces.

c. Figure 20 illustrates the composition of several typical bases of fire for the armored cavalry platoon in the attack.

#### **110. Supporting Fires for a Platoon in a Coordinated Attack**

Supporting fires for the platoon must be planned by the platoon leader. If all support squads are massed under troop control, mortar fire is requested through the troop commander. Supporting artillery fires are requested through the artillery forward observer working with the troop. In the absence of an artillery forward observer, the platoon leader requests supporting fires through the troop commander.

#### **111. Platoon Operation Order**

a. The platoon leader's order for the attack is invariably given orally. It is desirable to issue the order to key personnel of the platoon from a vantage point where they can view the terrain over which the attack will take place. If this cannot be done, the platoon leader will issue his order at any convenient location, using a map or sketch of the area to outline his plan. The platoon leader should adhere to the standard operation format in issuing his order.

b. The platoon leader usually issues the order to the platoon sergeant and section and squad leaders. These key noncommissioned officers then disseminate the instructions to their units. Time permitting, all personnel of the platoon should be afforded an opportunity to see the terrain over which the attack will take place.

#### **112. Attack Position**

a. If the plan of attack requires the use of an attack position, this position is occupied for the shortest possible time. (FM 17-1.) When the situation requires that the maneuvering element halt in the attack position, the platoon leader should ensure that local security is established; use is made of available cover and concealment; the platoon is in the prescribed formation; and readiness of platoon is reported to the troop commander.

b. Section and squad leaders make an inspection of their units and correct deficiencies as the situation permits.

#### **113. Conduct of Maneuvering Force**

a. The maneuvering force closes with the enemy as rapidly as possible. Maximum use is made of cover and concealment during the advance. The maneuvering force should advance as close as possible to the objective before employing fire and movement.

*b.* The maneuvering force applies maximum combat power on the enemy. The fire of the maneuvering force, reinforced by the base of fire, pins down the enemy, denies him observation and movement, and destroys his personnel and equipment.

*c.* The rifle squad remains mounted as long as possible. It dismounts when required to mop up enemy personnel not destroyed by tank, mortar, or artillery fire. The machinegun on the armored personnel carrier may be used to reinforce the fires of the tank section during the advance.

*d.* When scouts are part of the maneuvering force, they may reconnoiter the route of advance and provide flank security, or they may act as riflemen. When the route provides cover, scouts may reconnoiter the route until the last covered position is reached and then provide additional fire support or security for the assaulting tanks and infantry or participate in the assault as infantry.

#### **114. Conduct of the Base of Fire**

*a.* The base of fire commences firing on order. Mortar and artillery fire may be placed over advancing tanks and mounted armored infantry. Supporting fires are lifted or shifted from the objective at the request of the maneuvering force or by other pre-designated arrangement.

*b.* Tanks and automatic weapons in the base of fire may be moved at any time to obtain better fields of fire, to avoid enemy fire, or to join in the assault.

*c.* Elements in the platoon base of fire displace forward on pre-arranged plan or on order. The support squad should be left in position until its fires are masked or the objective is secure.

#### **115. Actions of Key Personnel During the Attack**

*a.* The platoon leader, who is normally with the maneuvering force, controls the conduct of the attack and varies the platoon formation to meet changes in the situation. His major concern is to seize the objective. Additionally, he keeps the troop commander informed of the terrain and enemy resistance encountered, reporting any change in the situation. Upon meeting strong resistance which the platoon cannot effectively engage, he requests reinforcements and supporting fires through the troop commander.

*b.* The platoon sergeant and section and squad leaders assist the platoon leader by aggressively carrying out orders during the attack, by supervising and controlling the actions of their units,

by constantly observing in their immediate areas, and by keeping the platoon leader informed of the situation.

#### **116. Assault on the Objective**

In the assault, the tanks advance onto the objective firing their weapons. The riflemen use assault fire to close with the enemy. During the assault, the tanks provide close-in support for the riflemen and the riflemen for the tanks. The assault continues to the far side of the objective, where action is taken to repel a possible enemy counterattack.

#### **117. Actions on the Objective**

a. When the objective is taken, the position is consolidated and the platoon is reorganized for subsequent action.

b. The objective should be consolidated in the minimum amount of time. Plans for consolidation should be included in the platoon operation order for the attack. Actions by the platoon during consolidation include:

- (1) Establishment of security by the scout section to the front and flanks.
- (2) Preparation by the tank section and rifle squad to repel counterattacks, to continue the advance, or to defend the position as required by the mission.
- (3) Deployment of the support squad to provide fire support for the actions described in (1) and (2) above and submission of requests for additional fire support.

c. Actions of the platoon in the reorganization may include:

- (1) Reporting by all elements of the status of personnel, equipment, and ammunition.
- (2) Redistributing personnel, equipment, and ammunition.
- (3) Evacuating personnel, POW's, and damaged equipment.
- (4) Accomplishing resupply as time and the situation permit.

#### **118. Resumption of Advance**

As a result of the platoon leader's continuous estimate of the situation, his knowledge of the troop commander's plan, and his own mission, a formation is adopted which will enable the platoon to readily resume operations. The platoon may reorganize while continuing to move and continue to advance without halting after overrunning an objective. Continued movement will allow little opportunity to reassign personnel within the platoon. The platoon leader will call for status reports from each section and squad and report this information to the troop commander. When the situation permits he will make the necessary changes to ensure the continued operational effectiveness of his platoon.

## 119. Attack From March Column

*a.* In a meeting engagement, the armored cavalry platoon attacks rapidly from its march formation. In an attack from march formation, unlike a coordinated attack, no time is available for detailed preparations, and elements of the platoon may be committed to the attack piecemeal. The advantage of an attack in a meeting engagement rests with the force that reacts more quickly in a positive and aggressive manner. Prompt reaction facilitates seizing and retaining the initiative which is essential to the success of the attack.

*b.* The conduct of the attack from march formation requires the leading element on contact to deploy promptly and engage the enemy by fire. The platoon leader moves forward, makes a quick estimate, and plans his attack. All information pertaining to the situation is immediately forwarded to the troop commander. The platoon leader normally employs the scout section and support squad as a base of fire while he maneuvers the tank section and rifle squad to overcome the resistance. If the terrain restricts tank movement, he may employ dismounted scouts and riflemen in the maneuver element and retain his tanks in the base of fire. The platoon either overcomes the resistance with its organic weapons or develops the situation and reports to the troop commander so that additional force may be employed to overcome the resistance.

*c.* For additional information on the armored cavalry platoon in an attack from march column, see paragraph 99.

## CHAPTER 8

### DEFENSIVE OPERATIONS, ARMORED CAVALRY PLATOON

---

#### 120. General

*a.* This chapter covers the preparation and planning for defensive actions by the armored cavalry platoon.

*b.* The two general types of defense, mobile and position, are discussed in FM 17-1. Regardless of the type in which the armored cavalry platoon participates, the steps taken to organize the defensive position and the general conduct of the defense are essentially the same.

*c.* The armored cavalry platoon operating alone is limited in its ability to conduct a prolonged defense; however, in the execution of some missions it may be required to defend an area for a limited time. Defense may be an assigned mission for the platoon or may be forced by enemy action.

*d.* The organization of a defensive position and the conduct of a defensive action by the armored cavalry platoon require that the platoon leader apply the following fundamentals:

- (1) Make maximum use of terrain.
- (2) Provide for security.
- (3) Ensure that elements of the platoon are mutually supporting.
- (4) Organize the position in depth.
- (5) Provide for all-round defense.
- (6) Ensure that fires are coordinated.
- (7) Continue to strengthen the position.
- (8) Provide flexibility within the defense.
- (9) Make maximum use of offensive action.

#### 121. Employment of the Armored Cavalry Platoon in Defense

*a.* The armored cavalry platoon will normally participate in a defensive action as part of a larger force. The platoon may be required to defend alone when attacked by enemy forces, in securing a blocking position or roadblock, or when participating in operations conducted by a larger force on a broad front.

b. When the platoon participates in defense as part of a larger force, it may be employed as part of the security force, part of a troop defensive position, part of a striking force, or part of a reserve. The platoon leader must be prepared to coordinate fires with adjacent units, to assume lateral responsibilities as designated by the troop commander, and to coordinate his efforts with the troop commander in securing all-round defense for the troop.

## **122. Reconnaissance and Selection of Positions**

a. When assigned a defensive mission, the platoon leader, accompanied by his section and squad leaders, should make a thorough reconnaissance of the area to be defended.

b. The platoon defensive position should control the area in which it is located; take maximum advantage of natural obstacles; have good fields of fire; afford good observation; offer cover and concealment; and have a concealed route for occupation from the rear. The terrain to the front should force the enemy to become canalized and offer a minimum number of covered approaches.

c. Detailed plans must be made for the fire of tanks, automatic weapons, mortars, and other available fire support agencies. The platoon leader assigns sectors of fire to each segment of the platoon, and final protective fires to machineguns to ensure that the entire platoon area of responsibility is covered.

## **123. Occupation and Preparation of Platoon Defensive Position**

a. The platoon leader assigns specific areas of responsibility to each element of the platoon. Local security to the front and flanks of the position is provided by establishing observation posts to give early warning of enemy approach. Listening posts are used at night instead of observation posts. Patrols are used to cover areas not otherwise under observation.

b. The platoon defensive position is organized around the tank section. The primary position selected for the tank section covers the most likely avenue of enemy armor approach into the position. Supplementary positions are then selected to cover other possible approaches. Each tank crew provides its own local security; therefore, at least one member of the crew is required to be in the turret of the tank and alert at all times. At night and during other periods of limited visibility, the platoon leader may require the tank section leader, normally the platoon sergeant, to position the tanks closer together for better mutual defense and protection. A range card is prepared for each tank occupying a defensive position.

c. The rifle squad is located to provide maximum firepower to the front and flanks of the position and to protect the tanks from hand-carried antitank weapons or devices. The platoon leader designates a primary position for the rifle squad and assigns a sector of fire to be covered. The rifle squad leader reconnoiters the primary position and selects primary and alternate positions for the machineguns, automatic rifles, and individual riflemen in the squad. The fire teams are placed so they can fire across the front and flanks of the platoon defensive position. If possible, the armored personnel carrier should be employed in the squad area. The vehicular-mounted machinegun can be used to increase the defensive firepower of the platoon. The 3.5-inch rocket launcher is sited to cover the most likely avenue of armor approach in the platoon sector not covered by tank fire. All personnel should dig in and make maximum use of cover and concealment. Range cards should be prepared for the machineguns. The rifle squad leader should position himself where he can best control the actions of the squad. At least one man at each machinegun and automatic rifle position should be alert at all times. The organization of the squad position may change at night so as to provide better close-in defense and protection.

d. The scout section may provide security for the position or be employed as riflemen. When the scout section is employed to provide security for the platoon position, it will normally establish observation posts and conduct patrols. At times, the crew of one  $\frac{1}{4}$ -ton truck is sufficient to give adequate early warning of enemy approach while the remainder of the scout section is employed to add strength or depth to the platoon defensive position. When scout elements are employed as riflemen, they should be employed by squad.

e. The support squad provides close indirect fire support for the platoon. It is usually located to the rear of the position and is normally responsible for rear security of the position. If the platoon is occupying part of the troop sector, the mortars may be employed under troop control. When the mortar remains under platoon control, the platoon leader normally designates primary and supplementary positions. If necessary, the mortar squad leader selects alternate positions.

f. See figure 21 for an illustration of a typical platoon defensive position.

g. Vehicles of the platoon, not employed in a security mission or in the defense, should be located to the rear of the position in well concealed and defiladed positions.



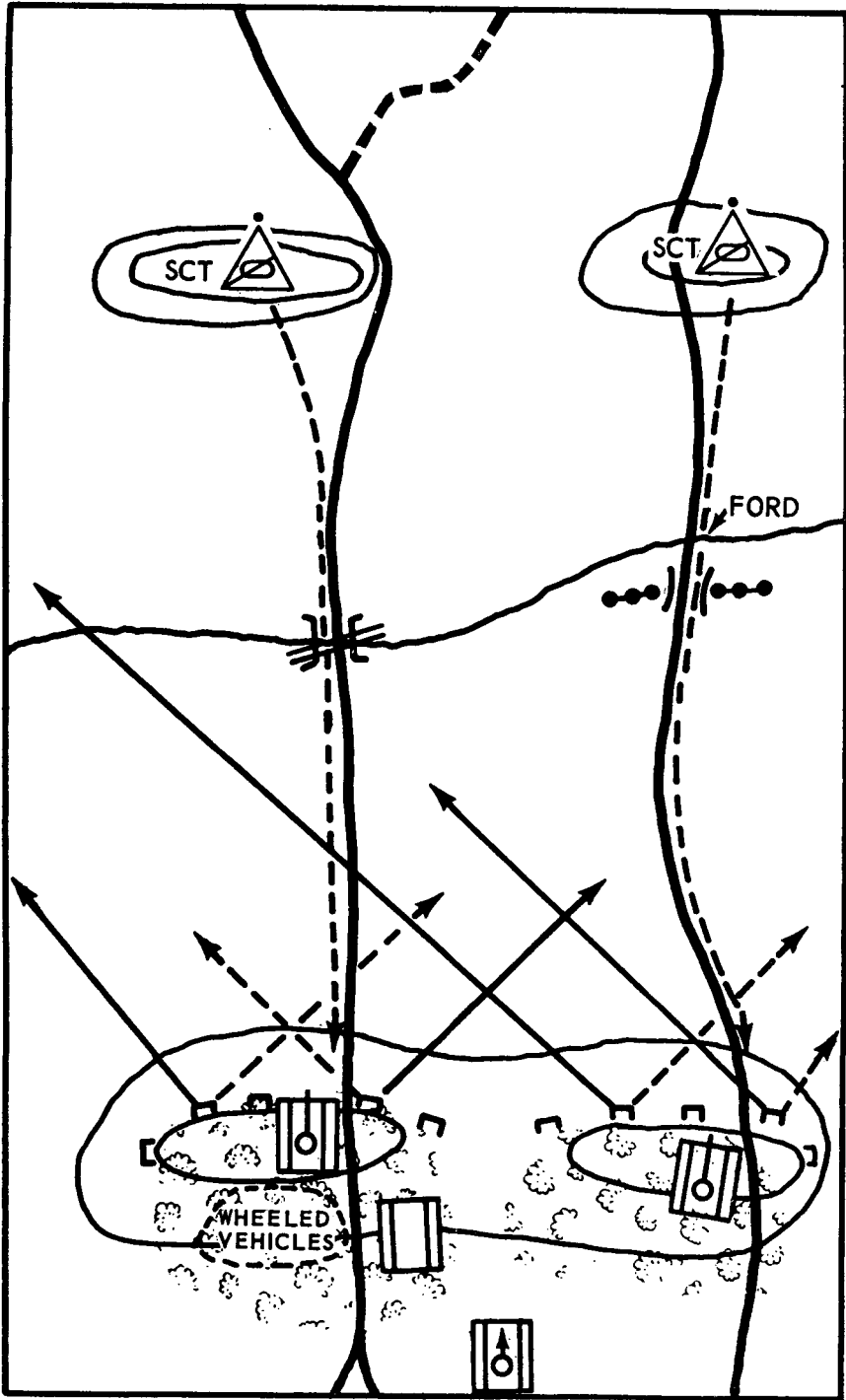


Figure 21. Armored cavalry platoon in defensive position.

*h.* The platoon is capable of preparing obstacles and installing minefields. The use of demolitions for the destruction of bridges, felling trees, and cratering roads should be considered by the platoon leader. The use of such demolitions must be coordinated with higher headquarters and be in consonance with the overall plan of defense. If authority is received from higher headquarters, the platoon leader may install protective minefields. Such minefields are covered by platoon direct fire weapons. Smoke may be used to reduce effective enemy observation and to confuse the enemy forces. The platoon should continue to strengthen the defensive positions as long as time permits.

#### 124. Platoon Order for Defense

The platoon leader issues his order orally to the key noncommissioned officers of the platoon while at the position to be defended. This enables the platoon leader and section and squad leaders to become thoroughly familiar with the area and reduces the possibility of misunderstanding. The order should be issued in time to permit the section and squad leaders to make a reconnaissance of the area to be defended.

#### 125. Conduct of Defense

*a.* The success of the platoon defense depends largely on the organization of the position and on the effective use of the firepower available. The defense must be conducted aggressively. The platoon leader must take advantage of enemy mistakes. The enemy should be engaged continuously from the time he is within effective range of available weapons. The platoon continues to defend its position until directed to move by higher authority. Within the platoon position, however, the platoon leader may adjust his forces as the situation develops.

*b.* Defensive fires of the platoon are coordinated to ensure maximum effective fire during both daylight and darkness. Mutually supporting tanks cover the probable avenues of armor approach. Interlocking bands of machinegun fire should cover the entire platoon sector. The mortar places fires into areas which cannot be reached by other weapons of the platoon, particularly covered areas in which the enemy might assemble or advance through.

*c.* In defensive situations, the platoon provides its own local security. The scouts will usually provide security to the front and flanks, and the support squad to the rear.

#### 126. Platoon Blocking Positions and Roadblocks

*a. Blocking Positions.* A blocking position is organized to deny

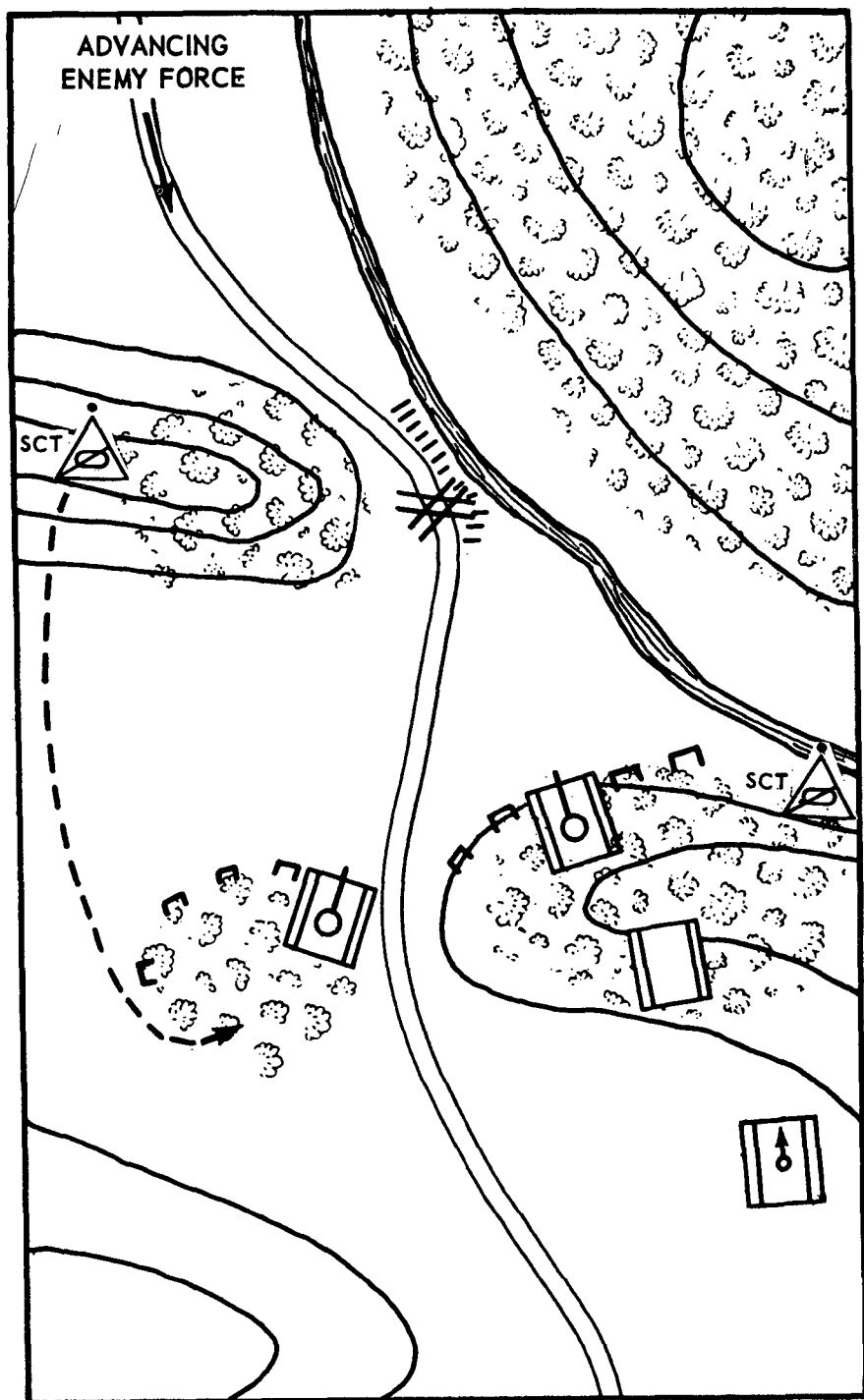


Figure 22. Armored cavalry platoon roadblock.

the enemy access to a given area or to prevent further advance of the enemy in a given direction. The platoon may be given a mission to establish a blocking position, or it may do so on the platoon leader's initiative in carrying out another mission. A blocking position may consist of a roadblock, or it may consist of a platoon defensive position which covers a likely avenue of enemy approach.

*b. Roadblocks.* Wherever the movement of vehicles is largely restricted to roads, roadblocks are especially important to the platoon in carrying out many of its assigned missions. Before establishing a roadblock, the platoon leader should consider all available means to obstruct, delay, and canalize enemy movement. Natural obstacles, mines, demolitions, barbed wire, and logs are means commonly used. Booby traps may be used in conjunction with these means. In addition, the element of surprise and the ability of the platoon to cover the obstacles by fire must be considered. The roadblock usually incorporates obstacles covered by fire; however, if time or the lack of obstacle material prevents the platoon from physically placing an obstacle in the road, it establishes the roadblock by fire alone. Having selected the point or area along a road where the roadblock will be established, the platoon leader must select positions for each element of the platoon and allot tasks for preparing the position and creating an effective obstacle. In establishing the roadblock, the scouts will normally provide security to the flanks and assist in covering possible bypass routes which the enemy may attempt to use in avoiding the roadblock. The tank section is positioned to cover the roadblock and the approaches to it. The rifle squad, assisted initially by the scouts, will normally construct the obstacle as a first priority, and then provide close-in protection for the tanks. The support squad will be positioned to cover by fire designated points along the route to the roadblock and to cover possible bypass routes. Figure 22 illustrates a typical platoon roadblock.

## 127. Combat Support for Platoon in Defense

*a.* In the conduct of a defensive mission, the armored cavalry platoon may receive support from artillery, engineers, and Army aviation.

*b.* An artillery forward observer will normally be available at troop level to assist in planning and requesting artillery fire for elements of the troop. The platoon leader will normally request artillery fire from the forward observer with the troop.

*c.* Engineer support will be available to the platoon as required

in the accomplishment of the mission. Engineer support for the platoon is made available by request to troop headquarters.

*d.* Army aircraft, when available, should be used to assist in locating enemy forces and to move elements of the armored cavalry platoon into the defensive position. This support is obtained by request to troop headquarters.

## CHAPTER 9

### DELAYING ACTIONS, ARMORED CAVALRY PLATOON

---

#### 128. General

a. The armored cavalry platoon may be required to conduct a delaying action. A delaying action is a retrograde movement in which the forward cavalry platoon seeks to delay the advance of an enemy force inflicting maximum punishment on the enemy.

b. The platoon can most effectively delay by occupying successive positions along a single route. This route is normally designated as the route of withdrawal.

c. Situations under which the platoon may be required to conduct a delaying action are as follows:

- (1) When the troop is performing a security mission and the platoon is covering an enemy avenue of approach.
- (2) When the troop is conducting delaying action.
- (3) When the platoon encounters an advancing superior enemy force during a reconnaissance or security mission.

d. See FM 17-1 for a complete discussion of fundamentals, planning, and conduct of a delaying action.

#### 129. Reconnaissance and Selection of Platoon Delaying Positions

a. The platoon leader must reconnoiter all terrain along his route of withdrawal in order to select platoon delaying positions. He makes maximum use of all favorable terrain between troop delaying positions. Sections and squads are disposed to cover the main avenue of approach to the delaying position, but plans must also be made to cover other likely avenues of approach. The most important factors to consider in selecting delaying positions are—

- (1) Key terrain.
- (2) Observation and fields of fire.
- (3) Cover and concealment.
- (4) Obstacles across the front and flanks.
- (5) Avenues of enemy approach.
- (6) Routes for withdrawal and lateral movement.

b. The platoon leader makes a personal reconnaissance of the initial delaying position. This position is usually selected based

on the most likely enemy avenue of approach. As the platoon prepares the initial delaying position, the platoon sergeant and other designated personnel are sent to reconnoiter the next delaying position. The platoon sergeant, normally uses the platoon leader's command vehicle (1/4-ton truck), with its driver and one or more men from the rifle squad, for the organization and improvement of the next delaying position. Radio contact is maintained with the platoon leader to effect necessary coordination. When the platoon arrives at the second delaying position, the platoon sergeant guides the section and squad leaders to their positions. As soon as practical thereafter, the platoon sergeant withdraws to the next succeeding position and repeats the procedure described above.

### 130. Coordination and Control of Platoon in Delaying Action

The platoon leader must ensure that coordination is effected and contact maintained with adjacent units and units to his rear. This may be accomplished by radio or by rendezvous at designated contact points. Contact is maintained by efficient use of scouts and the various means of communication. Control of all elements of the platoon in a delaying action is essential and is assured by the close personal supervision of the platoon leader.

### 131. Employment of Platoon in Delaying Action

*a. Scout Section.* The scout section is employed to the front and flanks to provide early warning of enemy approach and to adjust long-range supporting fires.

*b. Tank Section.* The tank section provides long range direct fire and antitank defense for the platoon. The section is employed as a unit with its tanks positioned to be mutually supporting.

*c. Rifle Squad.* The rifle squad is located to provide close-in protection for the tanks and to cover obstacles by fire. Automatic weapons normally are placed on each flank of the position.

*d. Support Squad.* The support squad furnishes indirect-fire support. It usually is positioned to the rear in defilade and is responsible for rear security.

*e. Platoon Headquarters.* The platoon leader may control the platoon from a tank, an armored personnel carrier, or from his command vehicle (1/4-ton truck). He should position himself where he can best control the actions of the platoon.

### 132. Platoon Occupation and Organization of the Delaying Position

Each platoon position is organized around the tank section.

Tanks are placed on terrain features that dominate likely avenues of approach, permit long range fires, and facilitate covered withdrawal to the next delaying position. The occupation of each delaying position is similar to the occupation of a platoon defensive position (fig. 23). Basic factors which the platoon leader must consider in occupying a delaying position include:

- a. Primary, alternate, and supplementary positions.
- b. Preparation of range cards.
- c. All-round security.
- d. Coordination with other units.

### 133. Platoon Preparation for Delaying Action

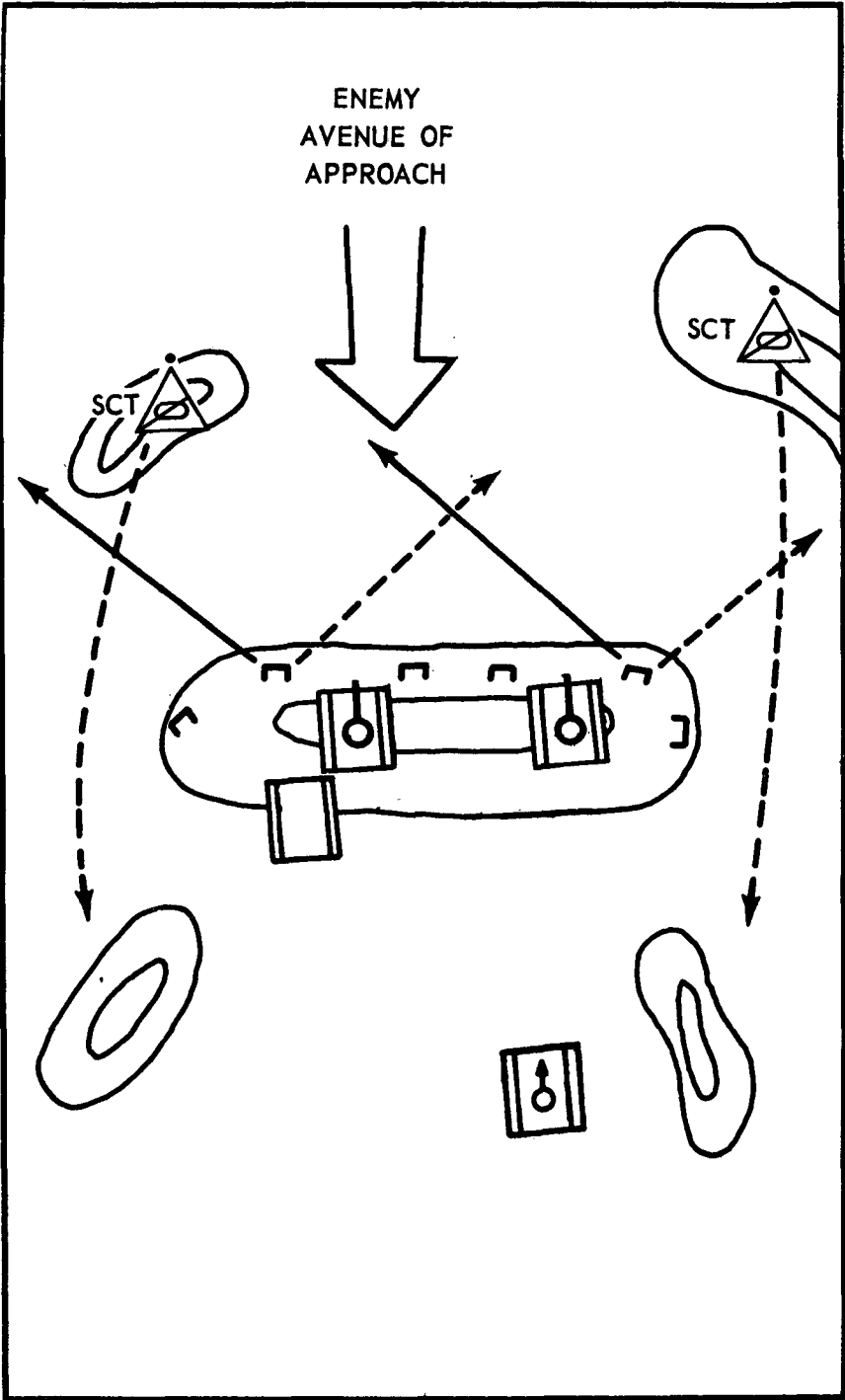
The platoon leader keeps the troop commander informed of the specific position occupied by the platoon. He ensures that all squads and sections make maximum use of available time to improve and strengthen the position occupied by the platoon. Tanks are positioned in hull defilade, fires are coordinated, and fields of fire are cleared for all weapons. Individual foxholes and automatic weapons emplacements are prepared and improved. All positions are camouflaged. Range cards are prepared for tank weapons, automatic weapons, and the mortar. Obstacles are constructed and covered by fire. The position and planned fires are coordinated with adjacent units. Covered routes of withdrawal are selected and reconnoitered for each vehicle to the platoon route of withdrawal.

### 134. Conduct of Platoon Delaying Action

In a delaying action, successive positions are occupied long enough to cause the enemy to halt, develop the situation, and deploy for the attack. The platoon leader must keep the troop commander informed of the platoon situation to ensure receipt of orders for the platoon withdrawal before it becomes decisively engaged. Contact with the enemy should be maintained throughout the action. Elements of the platoon conduct the delaying action as follows:

a. *Scout Section.* The scout section is employed well forward to maintain contact and give early warning of enemy approach. It remains in contact with the enemy and directs supporting long range fires. As the enemy approaches the platoon delaying position, the scout section withdraws by squads, normally to the flanks of the platoon, to positions where they can provide flank security. Scouts normally remain concealed in position and do not fire except to defend or extricate themselves. They maintain contact with the enemy and report any attempt by the enemy to bypass or envelop the position.





*Figure 23. Armored cavalry platoon in delaying action.*

b. *Tank Section.* As the enemy approaches the delaying position, the tanks open fire at maximum effective range. This fire is delivered to force premature deployment by the enemy and to inflict maximum casualties.

c. *Rifle Squad.* The rifle squad withholds its fire until the enemy is within effective range of small arms. Maximum use should be made of the machinegun mounted on the armored personnel carrier.

d. *Support Squad.* The support squad delivers indirect harassing fires to the limit of its range.

### 135. Platoon Withdrawal to Next Delaying Position

The platoon holds each delaying position until forced to withdraw by enemy action or to conform to the withdrawal of adjacent friendly units. In either case, the authority to withdraw rests with the troop commander. If the platoon faces a forced withdrawal due to enemy pressure, the platoon leader must inform the troop commander in sufficient time to obtain permission to withdraw before becoming decisively engaged. He must keep the troop commander informed as the situation develops so that the troop commander has detailed knowledge of the situation on which to make a proper decision. The platoon may withdraw from the delaying position as a unit, or by squads and sections. In either case, the withdrawal is accomplished as follows:

a. *Platoon Leader.* The platoon leader remains with the last element to withdraw.

b. *Tank Section.* In daylight, the tank section is normally the last element of the platoon to withdraw from the position. At night, in heavy woods, or when observation is otherwise restricted, the tank section may withdraw under cover of the rifle squad.

c. *Rifle Squad.* When the terrain provides good observation, the rifle squad normally withdraws before the tank section. At night or when visibility is limited, the rifle squad may remain on the delaying position until after the tank section has withdrawn.

d. *Support Squad.* The support squad will normally withdraw first after maximum assistance has been given to the other elements of the platoon in delaying the enemy. It will cover the withdrawal of other elements of the platoon from its new firing position.

e. *Scout Section.* The scout section leader controls the withdrawal of the scout squads and coordinates this movement with the withdrawal of the other elements of the platoon. As the scouts withdraw on the flanks of the platoon, they should maintain contact with the enemy.

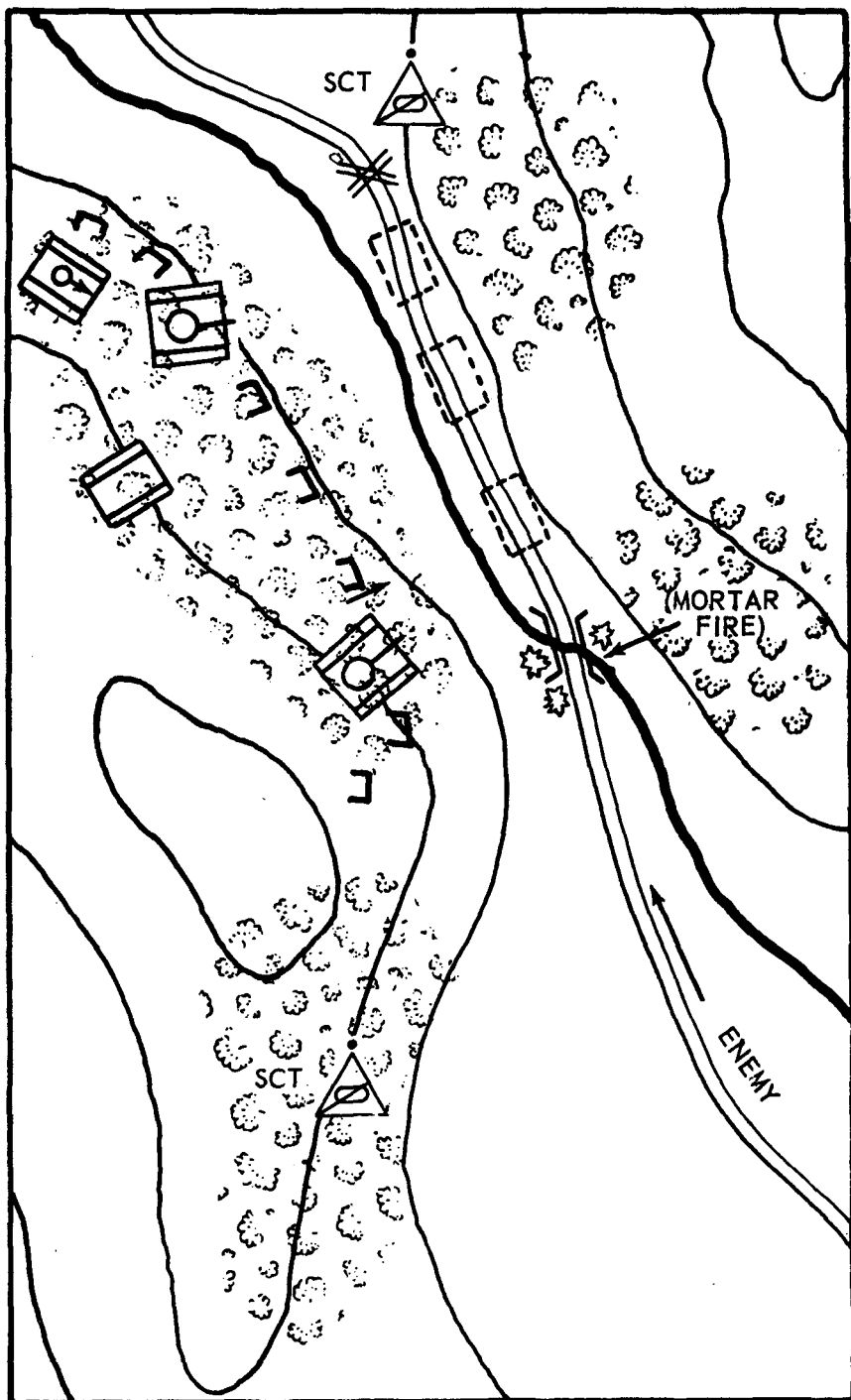


Figure 24. Organization of armored cavalry platoon ambush in close terrain.

### 136. Platoon in Reserve, Delaying Action

The platoon may function as the reserve for the troop. As the reserve, the platoon will frequently be positioned in depth on a successive troop delaying position. It may be required to establish a blocking position, launch a limited objective counterattack, support the withdrawal of other platoons by fire, or reinforce or replace another platoon as part of the delaying force.

### 137. Ambush by Platoon in Delaying Action

a. An ambush is a tactical device used to entrap an enemy force and destroy it. Troops participating in an ambush wait in a concealed position for an opportune time to attack an unsuspecting enemy.

b. The frequency that an armored cavalry platoon can employ an ambush is limited by the terrain and enemy action. The platoon must be capable of destroying the enemy force which it intends to ambush; otherwise the platoon may become so heavily engaged that it is unable to withdraw. An ambush prepared by a platoon should be organized so that the leading vehicle and last vehicle of an enemy column are engaged. If possible, fire should also be placed on all vehicles in the enemy column to preclude their employment against the platoon (fig. 24). Routes of withdrawal must be carefully selected and reconnoitered to permit rapid withdrawal of the platoon before the enemy can react to the ambush.

c. In an ambush, elements of the platoon are positioned to deliver maximum firepower on the enemy force. Tanks are positioned to deliver effective direct fire on all vehicles in the ambush. The rifle squad is positioned to prevent the easy escape of dismounted enemy troops. The scout section may be placed to provide security or where it can add to the firepower of the ambush. This section may also be used to help seal off the ambush. The support squad delivers indirect fire to the rear of the ambush position to prevent the escape of enemy troops and to preclude reinforcement of the ambushed force.

### 138. Combat Support for Platoon in Delaying Action

Combat support for the armored cavalry platoon in the conduct of a delaying action as in a defense will normally be provided by artillery, engineers, and Army aviation (par. 127).

**PART FOUR**  
**ARMORED CAVALRY TROOP**  
**CHAPTER 10**  
**GENERAL**

---

**Section I. GENERAL**

**139. Purpose and Scope**

Part four of this manual covers the organization, tactics, and techniques employed by the armored cavalry troop. Reconnaissance, security, offensive, defensive, and retrograde operations are each covered in a separate chapter. The armored cavalry troops of the armored division, infantry division, and armored cavalry regiment are identical in organization and conduct various operations in essentially the same manner; therefore, the tactics and techniques for each type of operation discussed in this manual pertain to each of these troops.

**140. Missions and Capabilities of the Armored Cavalry Troop**

a. The armored cavalry troop is designed to perform reconnaissance, provide security, and execute combat missions as an economy of force unit. It is employed on missions which complement the squadron mission or the mission of the unit to which it is attached. The following missions are suitable for the armored cavalry troop:

- (1) Reconnaissance over a wide front and to extended depths.
- (2) Collection of information of intelligence value, including information on potential nuclear targets and nuclear damage assessment.
- (3) Providing flank security on one flank of a larger unit.
- (4) Acting as part of a security force between two larger units.
- (5) Acting as part of a covering force in offensive, defensive, or retrograde operations.
- (6) Providing a screen for a larger unit.
- (7) Performing rear area security.
- (8) Conducting offensive, defensive, and retrograde operations.

- (9) Maintaining liaison between major units.
- (10) Conducting chemical, biological, and radiological monitoring and survey operations.
- (11) Performing damage control operations.

b. The armored cavalry troop is capable of operating as an independent force for a limited period of time. The troop may be reinforced as required by the mission.

## Section II. ARMORED CAVALRY TROOP ORGANIZATION

### 141. General

The armored cavalry troop consists of a troop headquarters and three identical armored cavalry platoons. Figure 25 shows the organization of the armored cavalry troop.

### 142. Troop Headquarters, Armored Cavalry Troop

The armored cavalry troop headquarters consists of a headquarters section, an administrative, mess, and supply section, and a maintenance section.

a. *Headquarters Section.* The headquarters section comprises the troop command post. It is the operations center for the troop and is usually under the supervision of the executive officer. It consolidates reports and handles communication, liaison, and planning with higher headquarters and adjacent units. The headquarters section is composed of the troop commander, executive officer, first sergeant, communication chief, liaison sergeant, liaison agent, two intermediate-speed radio operators, tank crew for the headquarters tank, and drivers for the armored personnel carrier and light trucks in the section. Additional equipment in the section includes a short range ground radar set.

b. *Administrative, Mess, and Supply Section.* The function of this section is to feed, supply, and perform administrative duties for the troop. During combat the section normally operates from the squadron trains area or the trains area of the unit to which attached. Personnel include the mess steward, supply sergeant, troop clerk, cooks, and a driver. Transportation consists of two cargo trucks with trailers.

c. *Maintenance Section.* The maintenance section performs organizational maintenance on the vehicles, radios, and weapons of the troop. It performs vehicle evacuation within its capability. Personnel in the section are the maintenance sergeant, recovery mechanics, track vehicle mechanics, radio mechanics, a turret mechanic, and a mechanic's helper. Equipment in the section in-

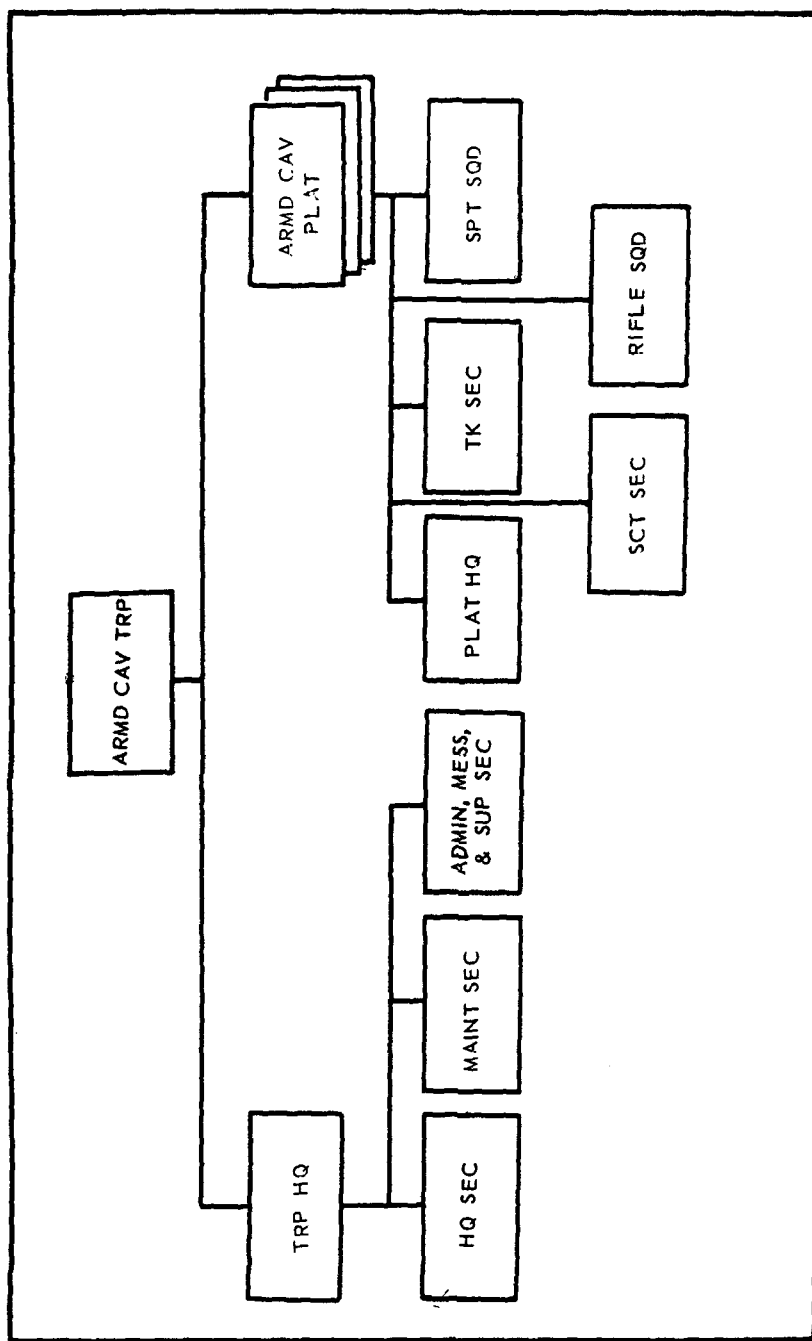


Figure 25. Organization, armored cavalry troop.

cludes a tracked recovery vehicle, an armored personnel carrier, and necessary light trucks.

### **143. Armored Cavalry Platoon**

The armored cavalry platoon organization is composed of a platoon headquarters, scout section, tank section, rifle squad, and support squad. See paragraphs 75 through 80.

## **Section III. DUTIES OF KEY PERSONNEL**

### **144. Duties of Troop Commander**

The troop commander is responsible for the training, combat employment, health and welfare, discipline, and administration of the troop. To discharge these responsibilities efficiently, the troop commander must train and use his subordinates to the fullest extent. He must continually supervise the actions of the troop. The duties of armor unit commanders are discussed in FM 17-1.

### **145. Duties of Executive Officer**

The executive officer keeps abreast of the tactical situation and must be prepared to assume command at any time. As the principal assistant to the troop commander, the executive officer supervises the functioning of the troop support elements and the activities of the troop command post. The executive officer is responsible for the movement, location, and security of the troop command post. He ensures that communication is maintained with the platoons, the troop commander, and the next higher headquarters.

### **146. Duties of First Sergeant**

The first sergeant is the troop commander's administrative assistant; however, his duties may vary from administrative and supply matters to command responsibilities. He assist the executive officer in command post control and represents him during his absence.

### **147. Duties of Communication Chief**

The communication chief advises the troop commander and executive officer on all communication matters. He trains troop communication personnel and supervises the installation, operation, and maintenance of troop communication systems. During operations he ensures that radio operators maintain efficient com-



munication, that they record all incoming and outgoing messages, and that they are properly relieved.

#### **148. Duties of Liaison Sergeant**

The liaison sergeant provides direct communication facilities between the troop command post and higher headquarters. He keeps informed of the existing tactical situation and the plans of the unit to which he is sent. Also, he may provide a radio relay station, carry messages and orders, and guide personnel or elements to the troop command post.

#### **149. Duties of Maintenance Sergeant**

The maintenance sergeant commands the maintenance section and advises the troop commander and executive officer on maintenance matters. He supervises and trains mechanics, except the radio mechanics; requests, issues, and stores repair parts; keeps maintenance records; and exercises overall supervision of organizational maintenance.

#### **150. Duties of Key Personnel in Administrative, Mess, and Supply Section**

*a.* The mess steward supervises the activities of the cooks, and is responsible for the preparation of food for the troop.

*b.* The supply sergeant is the troop commander's supply assistant. He maintains a hand receipt file on all property in the troop and clothing and equipment forms, and obtains expendable supplies.

### **Section IV. EMPLOYMENT, GENERAL**

#### **151. General**

The armored cavalry troop is organized, trained, and equipped to perform reconnaissance and provide security for the unit to which assigned or attached. The troop may engage in offensive, defensive, and retrograde operations in the accomplishment of its missions.

#### **152. Employment of Armored Cavalry Troop**

The armored cavalry troop operates under direct control of the parent squadron, or it may be attached to another unit as indicated below:

*a. Armored Division.* The troop may be attached to a combat command when required to assist in the accomplishment of the

combat command mission and control by the squadron is impractical.

*b. Infantry Division.* The troop may be attached to the brigade, a battle group, or the armor battalion to perform reconnaissance and security and when control by the squadron would be impractical.

*c. Armored Cavalry Regiment.* The troop may be attached to another squadron of the regiment to augment its reconnaissance and security capabilities.

## Section V. EMPLOYMENT OF SHORT RANGE GROUND RADAR

### 153. General

*a.* In the armored cavalry troop, the short range ground radar will usually operate under control of the armored cavalry platoon best suited to perform the mission in which the device is required. It is usually operated by trained personnel assigned to that armored cavalry platoon. FM 17-1 contains additional information on the short range ground radar.

*b.* For security, the radar should be located normally within or near the position of the platoon with which it is working. In the event that the mission or terrain conditions demand a location for the radar that is not near the platoon, it may be necessary to assign scouts or riflemen the mission of providing for its security.

*c.* Positioning of the radar is based on an analysis of the mission and capabilities of the set. Its location and employment should be coordinated with other ground radar equipment in the squadron in accordance with the squadron surveillance plan.

### 154. Missions

The missions assigned to the short range ground radar derive from the troop surveillance requirements. It is used to monitor, scan, or search a specified area. The specific mission assigned should include the type of radar surveillance to be conducted, an irregular operating schedule, duration of mission, area to be covered, and reporting of information.

### 155. Employment

*a.* The primary requirement for effective employment of the radar is that it be situated for line-of-sight operation. It must be oriented in azimuth and located on the map to enable the operator to accurately locate targets on the ground.

*b.* In defensive and retrograde operations, the short range ground radar may be used to monitor the main enemy avenue of approach and to scan critical areas and gaps between strongpoints. It is

most effectively used during periods of limited visibility to augment other troop security measures.

c. In offensive operations, the radar may be used to assist in providing flank security or to scan beyond the line of contact. It should be positioned well forward during the attack to allow scanning of the objective prior to and during the assault. Once the objective is reached, the radar may be used to maintain surveillance on likely avenues of enemy approach and thus assist in early warning against a possible counterattack.

## **Section VI. ORGANIZATION FOR COMBAT, ARMORED CAVALRY TROOP**

### **156. General**

The armored cavalry troop commander is responsible for the organization for combat of the platoons, the troop command post, and the troop trains. To determine the best organization of the combat force available to accomplish an assigned mission, the troop commander considers the factors of METT—mission, enemy, terrain and weather, and troops available. The essential elements of combined arms available within the troop enable the troop commander to organize for combat as required by the mission.

### **157. Task Organization of Combat Elements**

a. The armored cavalry troop is designed to conduct operations over either a wide front or a narrow front. In performing in either of these deployments, the troop should be organized into the best combination of tanks, riflemen, and scouts. This may be accomplished by employing the platoon as organized, by reinforcing one platoon with elements of another platoon, or by forming provisional platoons. The troop commander should consider grouping the three support squads under troop control whenever the situation permits them to support the entire troop from one location.

b. Figure 26 illustrates several typical task organizations that can be formed by the organic elements of the armored cavalry troop.

### **158. Combat Support for the Armored Cavalry Troop**

a. The armored cavalry troop normally operates without attachments. For a particular mission, tanks or infantry (armored or mechanized) may be attached. Artillery, engineers, and Army aviation may be attached or placed in support. If a tank or infantry unit, normally platoon size, is attached to the troop, it is usually employed intact. Tactical air may also be available to support troop operations.

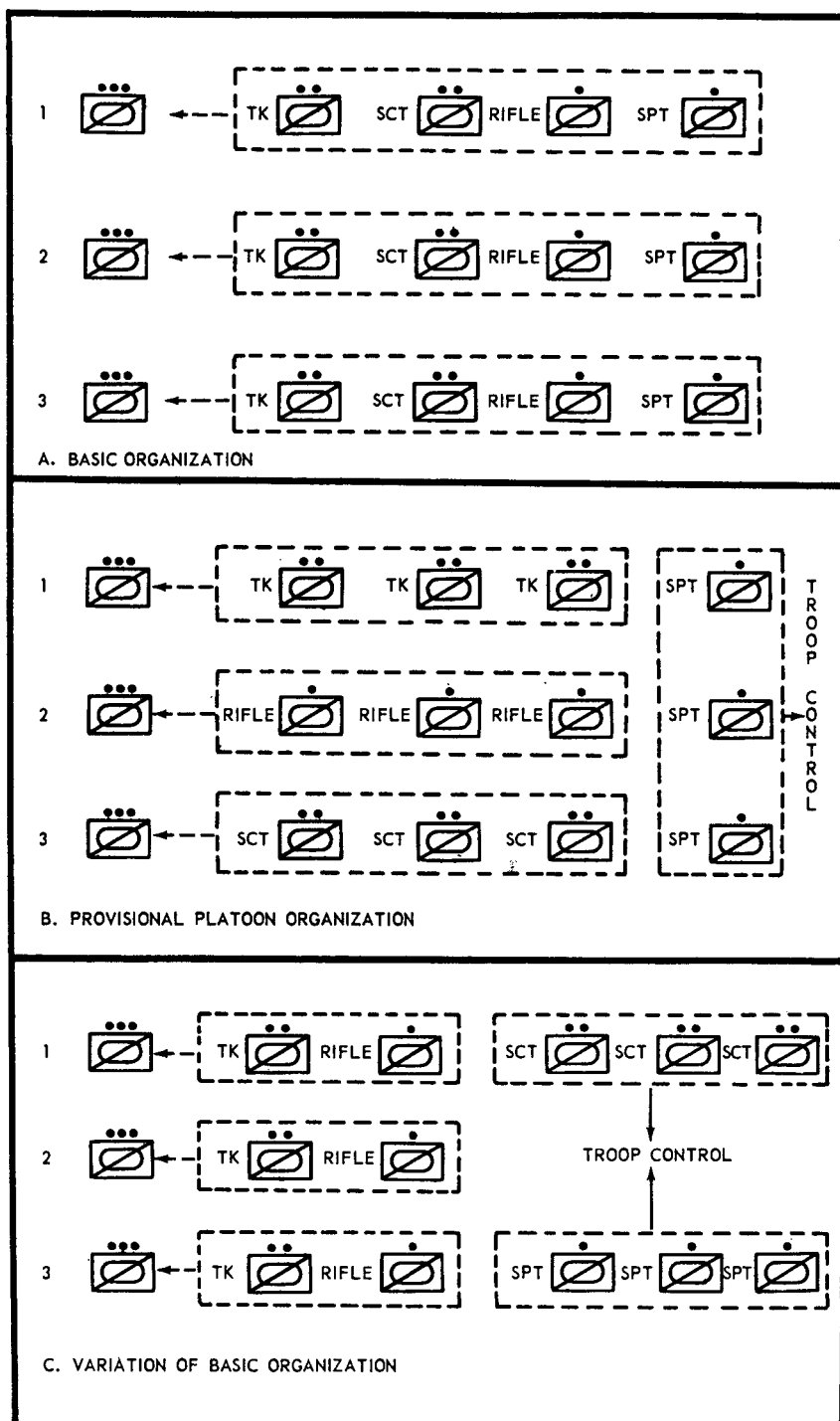


Figure 26. Typical task organizations, armored cavalry troop.

b. In the armored or infantry division, artillery support is usually provided by the artillery unit supporting the parent squadron or the major divisional unit to which the troop may be attached. The armored cavalry troop will have an artillery forward observer if artillery is in direct support of or attached to, the parent unit. When a forward observer is present, requests for artillery fires are processed through him. When an artillery forward observer is not available, the troop will request artillery fires through the next higher headquarters and adjust artillery fires with organic personnel. In the armored cavalry regiment, the howitzer battery organic to each squadron will habitually support troop operations and provide a forward observer to the armored cavalry troop.

c. Engineers may be attached to the armored cavalry troop when the situation so dictates. However, engineers are not normally attached below squadron level. Engineer reconnaissance parties may be employed with the troop for the purpose of gathering technical information on roads, bridges, and obstacles.

d. Army aviation support may be made available through the aviation company of the division or the armored cavalry regiment. A reconnaissance helicopter or light observation aircraft may be allotted to the troop commander for observation, reconnaissance, and control. Transport helicopters may be made available on a specific mission basis to airlift scouts or riflemen on combat, reconnaissance, or security missions. Additionally, scout vehicles and supplies may be transported by transport helicopters.

e. Tactical air support may be available to the troop during combat operations. When tactical air support is available, an Air Force forward air controller may be available at squadron level to control tactical air strikes in support of troop operations.

## 159. Organization for Combat and Employment of Troop Headquarters

a. *General.* During combat operations the troop headquarters is normally organized into the troop command post and troop trains. The troop command post contains the personnel and equipment required for control of the troop, while the trains include the organic or attached personnel and equipment necessary for logistical support of the troop.

### b. *Command Post.*

- (1) *Troop commander.* When the troop is committed, the troop commander normally controls the troop from either the headquarters section tank, his  $\frac{1}{4}$ -ton truck, or Army aircraft when available. He may be accompanied by an

artillery forward observer. The wide front usually covered by the troop requires that the troop commander position himself centrally or on terrain that is favorable for communication, observation, and control.

- (2) *Command post vehicle.* The troop command post is organized around the armored personnel carrier organic to the troop headquarters section. This vehicle normally follows the combat elements of the troop by bounds during offensive combat. During defensive or retrograde operations, the command post vehicle should be located to the rear of the combat elements. When not moving, it is located in a position facilitating communication with front line platoons and the squadron command post or other unit command post to which the troop is attached. The position selected should provide cover and concealment. This vehicle operates a station in the squadron command net FM, the troop command net FM, and the squadron command net AM.

*c. Troop Trains.* Troop trains consist of the administrative, mess, and supply section, the troop maintenance section, and the attached medical aid-evacuation team. Attached logistical elements also become a part of the trains. The troop trains may operate as a unit or be formed into troop combat trains and troop field trains. Combat trains, under the direct control of the executive officer, consist of those elements that accompany the troop during combat operations. These normally include the medical aid-evacuation team, the maintenance section, and attached squadron supply vehicles. Other organic or attached administrative and logistical elements constitute the troop field trains and operate with the squadron trains or the trains of the unit to which attached. See FM 17-50 for a detailed discussion on the composition and employment of troop trains.

## 160. Command, Control, and Liaison in the Armored Cavalry Troop

*a.* The commander of an armored cavalry troop exercises control of his unit through the executive officer and platoon leaders. His instructions or directions are transmitted as troop orders, either personally, by messenger, or by radio.

*b.* Liaison personnel are provided in the troop headquarters section. Normally this liaison party is dispatched to the next higher headquarters and conducts its operations there. When a requirement exists for liaison with a flank unit as well as with higher headquarters, temporary liaison parties may be established using scout personnel from organic platoons. See FM 17-1 for duties of liaison personnel.

## CHAPTER 11

### RECONNAISSANCE OPERATIONS, ARMORED CAVALRY TROOP

---

#### 161. General

a. Reconnaissance is the directed effort in the field to collect information of the enemy or area of operations. Reconnaissance is one of the primary missions performed by the armored cavalry troop. The troop may conduct assigned reconnaissance missions as part of the squadron, or independently when the squadron is engaged in another type of operation or when the troop is attached to another unit. Within the area to be reconnoitered, platoons are assigned zones, routes, or areas, and are prepared to engage in combat as required to accomplish the mission.

b. The combat information obtained by reconnaissance is used by commanders at all echelons in formulating their plans for future operations. FM 17-1 contains detailed coverage of the types of reconnaissance, fundamentals of reconnaissance, reconnaissance missions, and additional considerations appropriate to special reconnaissance operations.

#### 162. Reconnaissance Frontages

There is no established frontage that an armored cavalry troop can cover in the execution of a reconnaissance mission. Visibility, terrain, road net, anticipated enemy contact, and the nature of information sought are some of the factors that influence the frontage assigned to the troop. The frontage to be covered by the troop is normally designated by the headquarters directing the reconnaissance operation.

#### 163. Conduct of Reconnaissance Operations

a. The armored cavalry troop is prepared to make maximum use of its firepower and mobility to conduct reconnaissance operations. It will, however, use scouts for rapid, quiet movement when necessary to accomplish a mission requiring stealth. In the normal conduct of reconnaissance missions, gathering information is the primary task and this must not be jeopardized by unnecessary combat with the enemy. The troop, in some situations, will be

required to engage in combat to obtain the information desired. Otherwise, the troop will seek to avoid combat and bypass enemy resistance to accomplish the assigned task. When required to bypass an enemy force, the troop commander must report to the next higher commander enemy information and the fact that he is bypassing the enemy. When it is necessary for the troop to remain in contact with the enemy force, scouts may be used for this purpose.

b. When required by the situation, the troop will attack to accomplish a reconnaissance mission. The troop commander must be careful not to commit the troop to an attack that would prevent it from accomplishing the assigned mission. Time and distance factors will usually require the troop to attack without extensive preparation.

c. The troop formation must provide for adequate coverage of the assigned route, zone, or area. If fewer than three platoons can adequately cover the route, zone, or area, the remaining platoon or platoons may provide depth to the formation, provide flank security, support the forward elements, be committed to find a bypass around an enemy position, to expedite reconnaissance by reconnoitering critical terrain features.

d. If helicopters are available, scouts and riflemen may be moved by air to reconnoiter, envelop enemy positions, or bypass enemy resistance.

e. The troop commander controls the employment of his platoons by instructions normally transmitted by radio and the use of appropriate control measures.

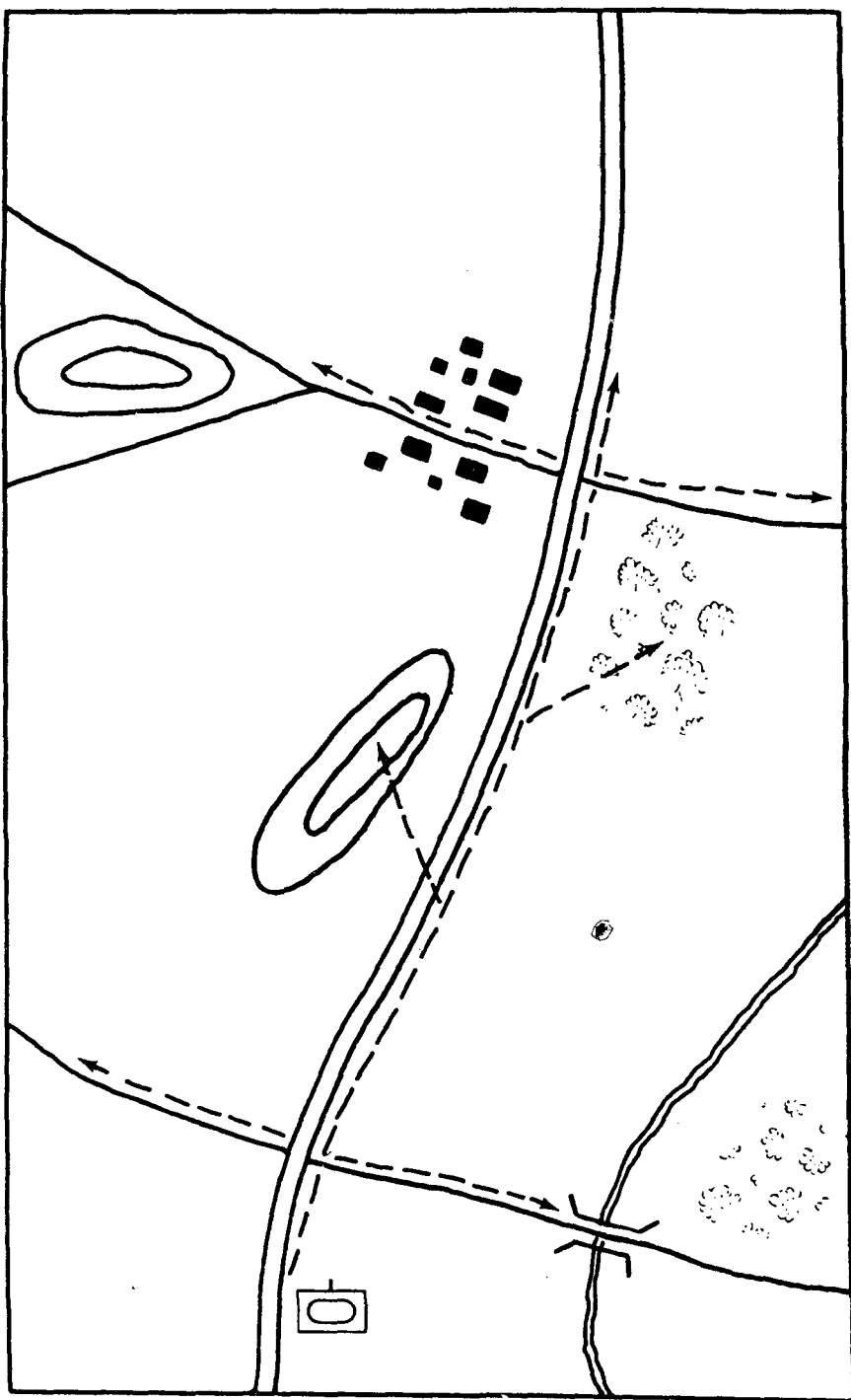
#### **164. Route Reconnaissance**

a. Route reconnaissance is the reconnaissance of a specified route and the terrain features immediately adjacent to that route, to obtain information of the enemy or the terrain (fig. 27).

b. In an area where little enemy action is anticipated, the armored cavalry troop may be assigned as many as three roads for route reconnaissance. When enemy action is imminent or anticipated, reconnaissance missions are usually assigned on the basis of one major road or avenue per troop.

c. The troop normally retains platoon integrity in the conduct of a route reconnaissance mission. Depending on the imminence of enemy contact, the leading element of the lead platoon or platoons may be varied. If the troop is conducting a route reconnaissance along a single route, it usually advances in column of platoons (fig. 28).





*Figure 27. Route reconnaissance by the armored cavalry troop.*

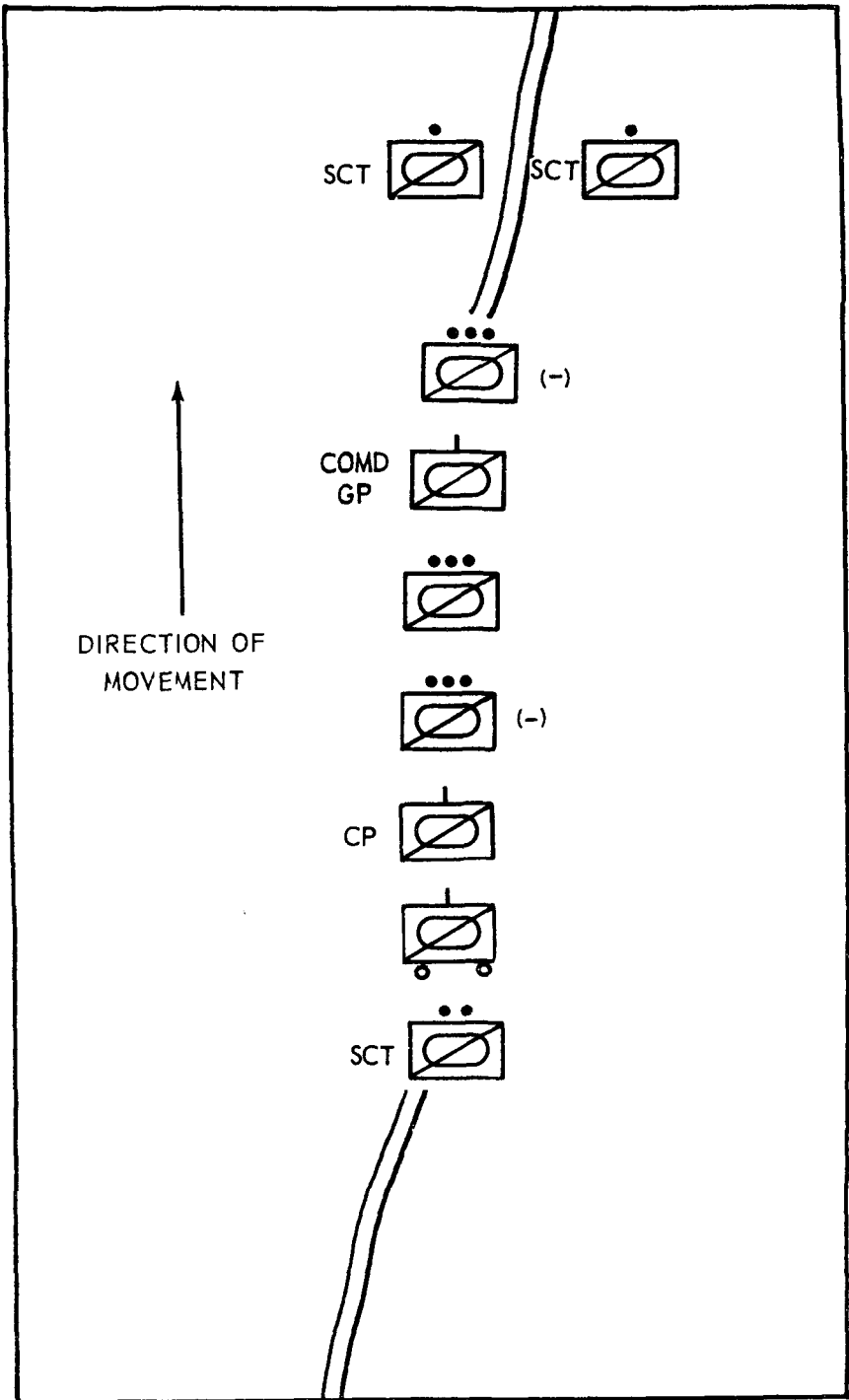


Figure 28. Armored cavalry troop in column formation conducting route reconnaissance.

d. Reconnaissance helicopters or light observation aircraft employed to support the troop in the accomplishment of a route reconnaissance will normally:

- (1) Be allocated on the basis of one or more aircraft per troop.
- (2) Operate to the front and flanks of the troop.
- (3) Be used for observation or for control when enemy action is anticipated.

Aircraft used in this manner extend the limit of observation to the front and flanks.

## 165. Zone Reconnaissance

a. Zone reconnaissance is the reconnaissance of all routes and terrain features within assigned boundaries. In conducting zone reconnaissance, the troop commander allots portions of the troop zone to platoons by establishing boundaries (fig. 29). The boundaries should be defined by such easily recognizable terrain features as roads, streams, ridge lines, and edges of woods.

b. The number of platoons to be employed depends on the situation and is directly related to the width of the zone, number of routes, terrain, capabilities of the enemy, and availability of other friendly ground and air units. The troop command post and combat trains usually advance by bounds on the best route available near the center of the troop zone.

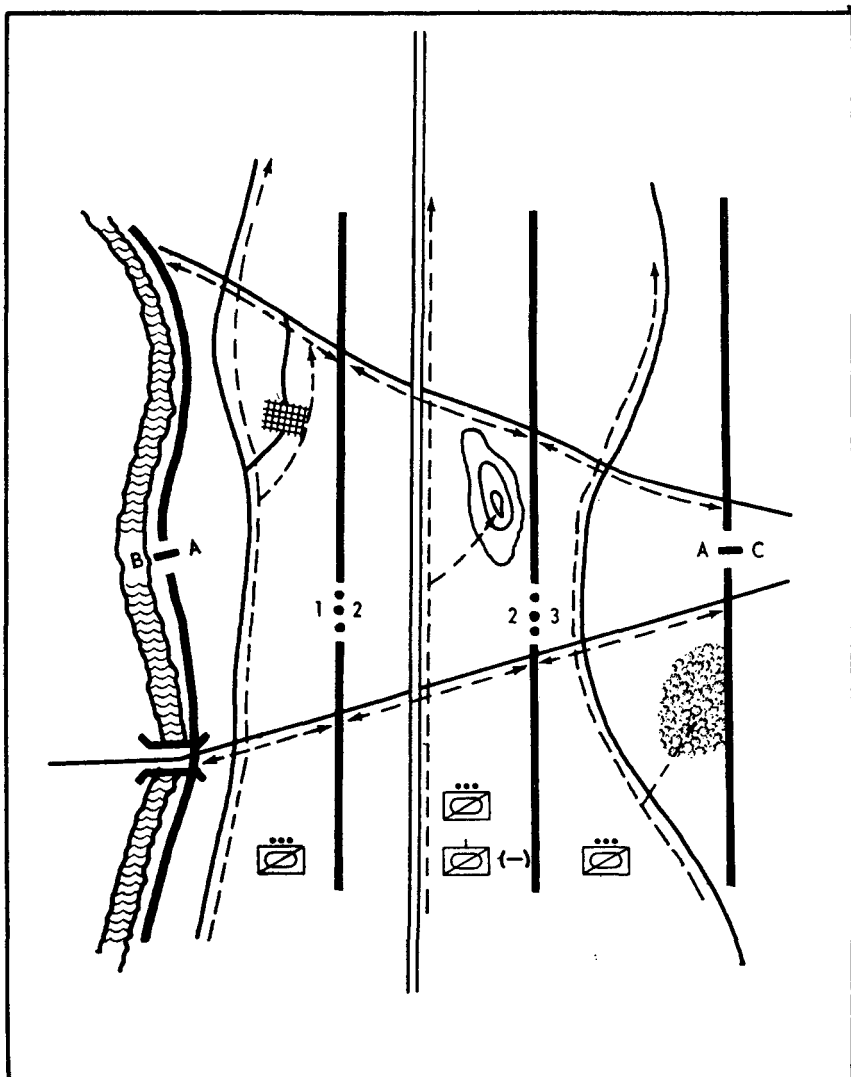
c. See figures 30 and 31 for typical troop formations during conduct of zone reconnaissance using multiple routes.

## 166. Area Reconnaissance

a. Area reconnaissance is the directed effort to search for and report information of the enemy or the terrain within a specifically defined locality.

b. The armored cavalry troop moves to the assigned area by the most direct route and performs area reconnaissance in the same manner as it performs zone reconnaissance, with the area being subdivided into platoon areas of responsibility. When the size of the area is relatively small, the reconnaissance may be conducted by moving elements of the troop directly to preselected points of observation from which the entire area can be observed. These observation posts can be supplemented by mounted or dismounted patrols and the short range ground radar.

c. If the time, distance involved, terrain obstacles, or enemy activity dictate, scout and armored infantry elements may be transported by helicopter directly to the area to be reconnoitered.



*Figure 29. Zone reconnaissance by the armored cavalry troop.*

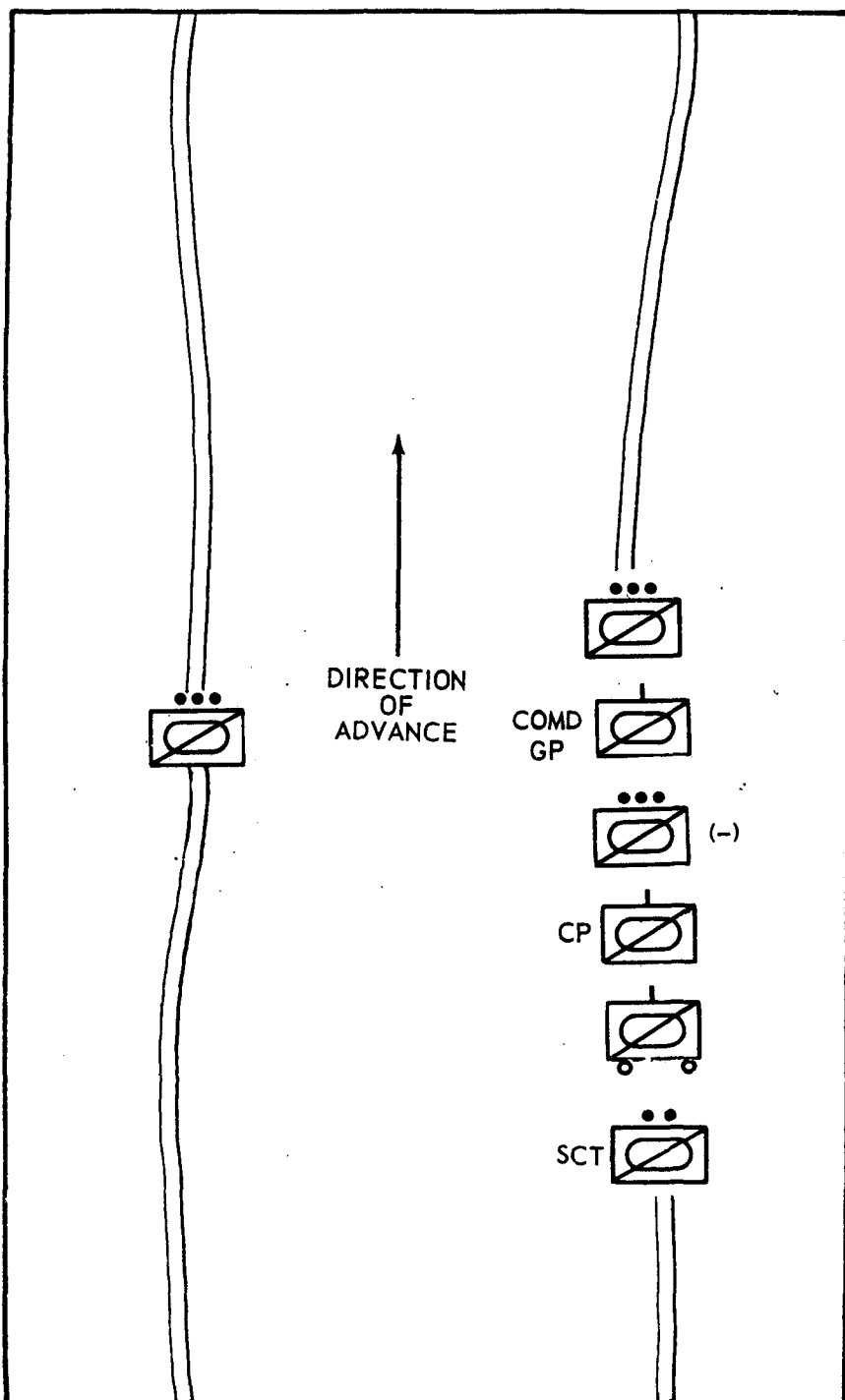
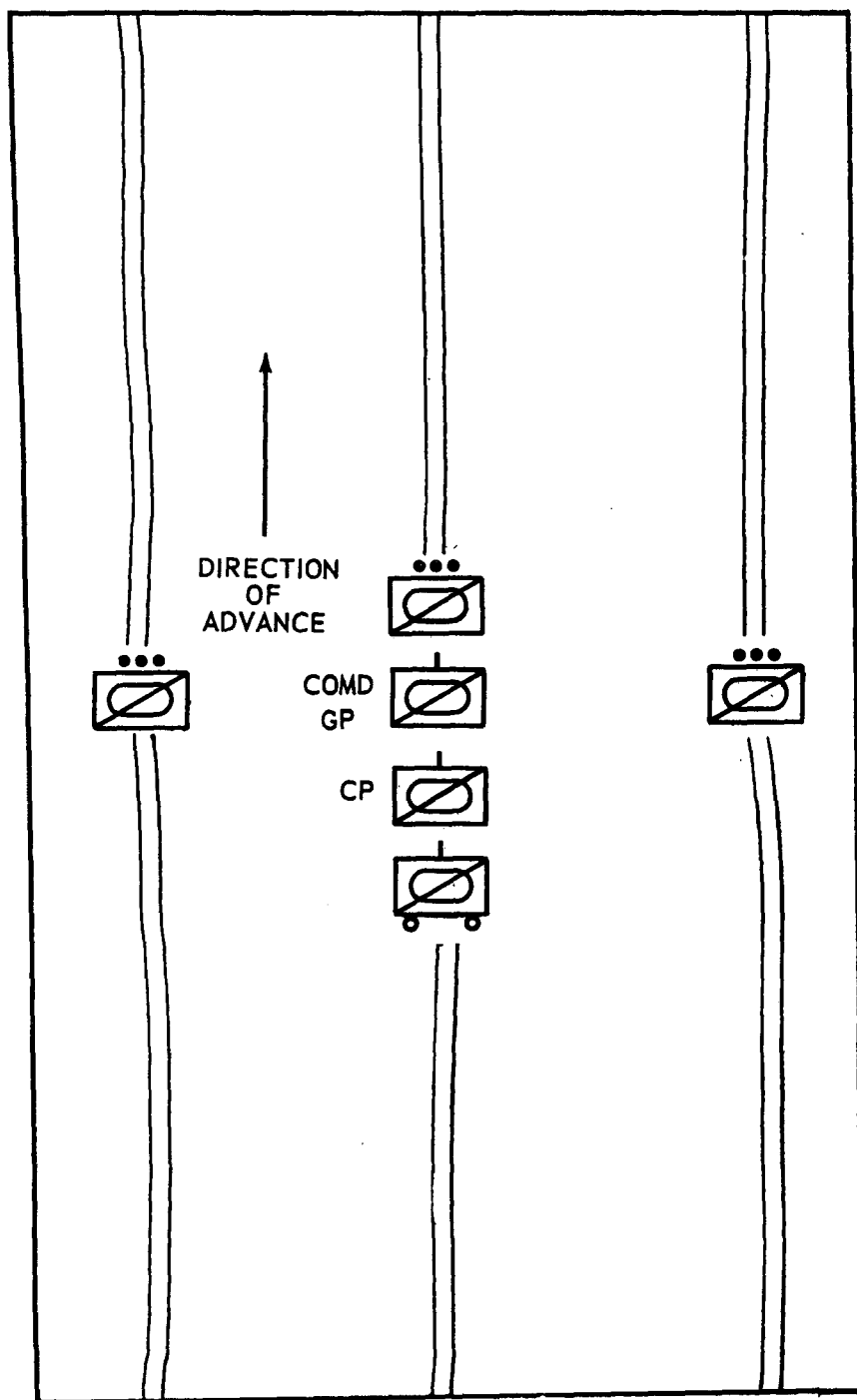


Figure 30. Armored cavalry troop advancing on two axes.



*Figure 31. Armored cavalry troop advancing on three axes.*

## CHAPTER 12

### SECURITY OPERATIONS, ARMORED CAVALRY TROOP

---

#### Section I. GENERAL

##### 167. General

a. Security forces are used to protect a command against surprise, ground observation, or interference by the enemy. The size of the security force will vary with the mission, terrain, distance from the supported unit, and tactical situation. The armored cavalry troop is well suited for use as a security force because of its mobility, firepower, and extensive and flexible means of communication. The troop may be employed on security missions alone or as part of a larger force. FM 17-1 covers the principles of security operations and the fundamentals of employment for each type of security action.

b. Security missions performed by the troop include advance guard, flank guard, rear guard, screening mission, participation as part of a covering force, and rear area security.

c. The troop will attack when necessary to accomplish its security missions. In making the attack the troop commander should be relatively certain of success. Important factors to be considered are the strength of the enemy, his vulnerability to the type of attack planned, and the degree to which he can be taken by surprise. The troop must not become involved in close combat to the extent that losses would jeopardize the accomplishment of the mission.

#### Section II. ADVANCE GUARD

##### 168. General

The armored cavalry troop may be employed as an advance guard or as part of an advance guard for the parent squadron or for the unit to which attached. When the troop is the advance guard for a larger unit, an artillery forward observer will normally be furnished to the troop. Army aircraft can render assistance to the advance guard by extending the range of reconnaissance and providing security, and should be made available to support the troop. The troop, when acting as the advance guard for a larger unit, should march far enough in advance of the main body to ensure that the main body has the time and space necessary to react to an enemy threat.

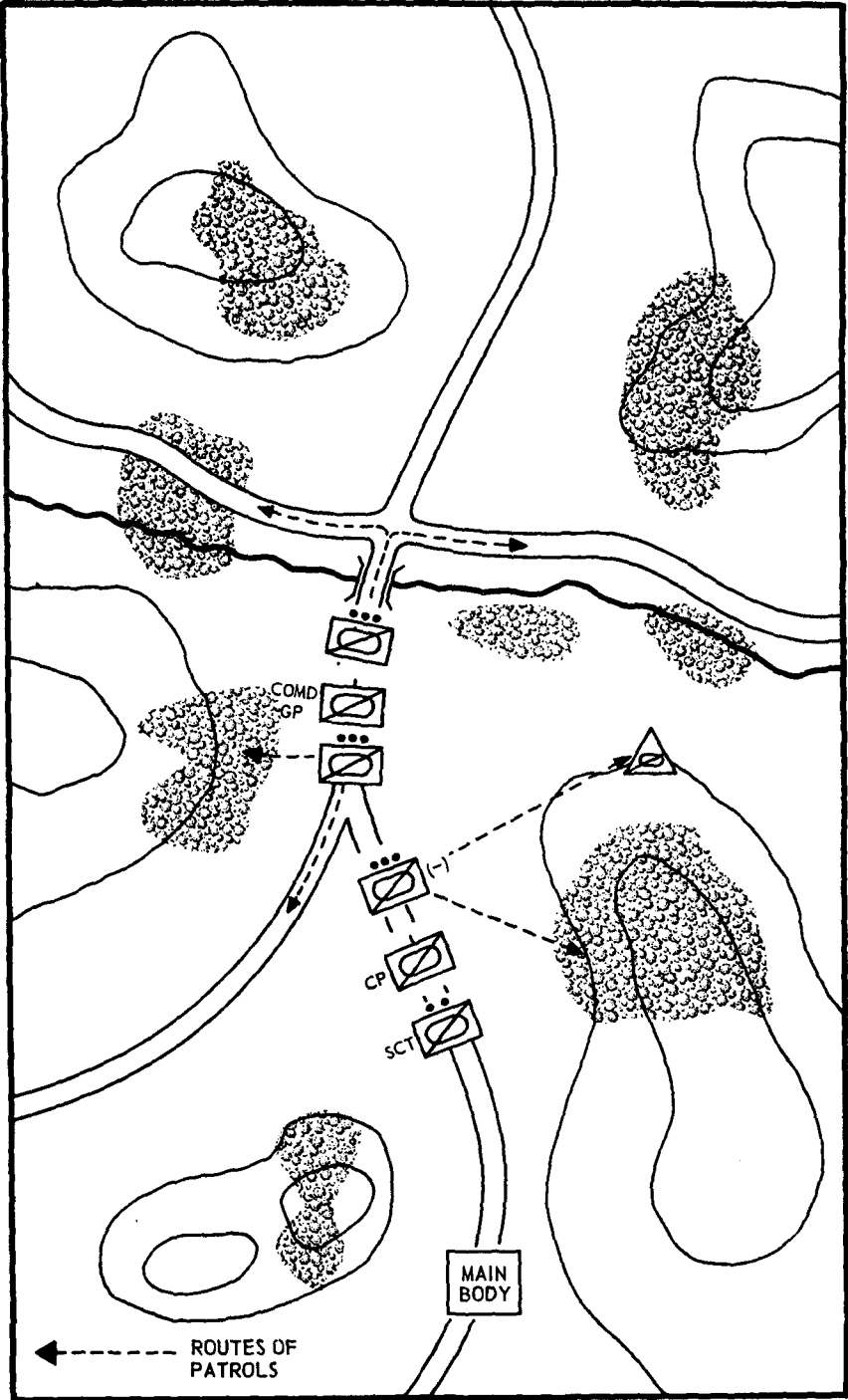


Figure 32. Typical formation for the armored cavalry troop employed as advance guard.



## 169. Formation for Advance Guard Mission

Within the troop, one platoon is designated as the advance guard. The balance of the troop follows in column, prepared to support the leading platoon in any action necessary to accomplish the mission. The following platoons will usually be employed as organized; however, their tanks and infantry may be grouped in provisional units under one platoon leader to provide an attacking force for the troop. The scout sections of these two platoons may be grouped under the third platoon leader to provide flank security. This element can make appropriate use of the short range ground radar. The three support squads are normally employed under troop control and provide mortar fire support to all elements of the troop (fig. 32).

## 170. Conduct of Advance Guard

a. Once enemy forces are encountered, the troop commander takes prompt and aggressive action to overcome the enemy force or fully develop the situation. The actions taken by the lead platoon leader initially and by the troop commander include four steps:

- (1) Deploy the platoon (troop) and report initial contact.
- (2) Develop the situation.
- (3) Choose a course of action.
- (4) Report the enemy situation and course of action taken to next higher headquarters.

b. As the advance guard, the troop should attack at once to overcome the enemy and permit the uninterrupted advance of the main body, or develop the situation so that the main body commander can take appropriate action to overcome the enemy. While deploying the troop for action, the troop commander places available mortar and artillery fire on the hostile position. If the efforts of the troop fail to dislodge or defeat the enemy, the troop prepares to act as the base of fire for an attack by the main body. Scouts and aerial observers attempt to locate and report the flanks of the enemy position.

## Section III. FLANK GUARD

### 171. General

A flank guard is a security detachment that protects the flanks of the main body. The armored cavalry troop may execute a flank guard mission alone or as part of a larger force. The flank guard protects the main body from ground observation, direct fire of

hostile weapons, and surprise attack. It must be far enough from the main body to allow adequate time and space for the maneuver of the main body against the enemy. The flank guard may be mobile or stationary, depending on the actions of the main body.

## 172. Planning for Flank Guard, Offense

a. In planning for a flank guard mission (fig. 33), the troop commander must consider the selection of blocking positions on the flank, the method of movement to be used, the route of advance, contact points, and the formation of the troop.

b. The troop commander makes a map study of the area of operations to determine likely enemy avenues of approach and selects a series of blocking positions on the flank, and parallel to the axis of advance, of the main body. The positions are selected to prevent enemy direct fire and observation of the main body. They should be located on defensible terrain that dominates the likely avenues of approach. Further, the blocking position should be a sufficient distance from the flank of the main body to permit timely warning of enemy approach and to provide sufficient time and maneuver room for the main body to react to the enemy threat.

c. The troop commander must develop a plan of maneuver that enables the troop to seize and hold selected blocking positions, as well as maintain contact with the leading elements of the main body. The plan must include provisions for seizing the blocking positions either by individual platoon actions or by a coordinated troop effort. Once a blocking position is secured, the troop commander must decide the strength required to hold the position.

d. Contact points are established between blocking positions held by elements of the troop to delineate the area of responsibility for the platoon holding each position. When a platoon is ordered to occupy a blocking position, it is responsible for the area from the position to the contact point on each flank. The platoon is required to make physical contact with adjacent units at the contact point.

e. The route of advance for the troop is usually selected by the troop commander. An exception would be during a penetration when the larger unit commander has designated a specific route for the troop acting as flank guard. The route selected by the troop commander should be far enough from the axis of advance of the main body so that the movement of the troop will not interfere with the maneuver of the main body. When possible, this route should permit rapid access to the line of blocking posi-

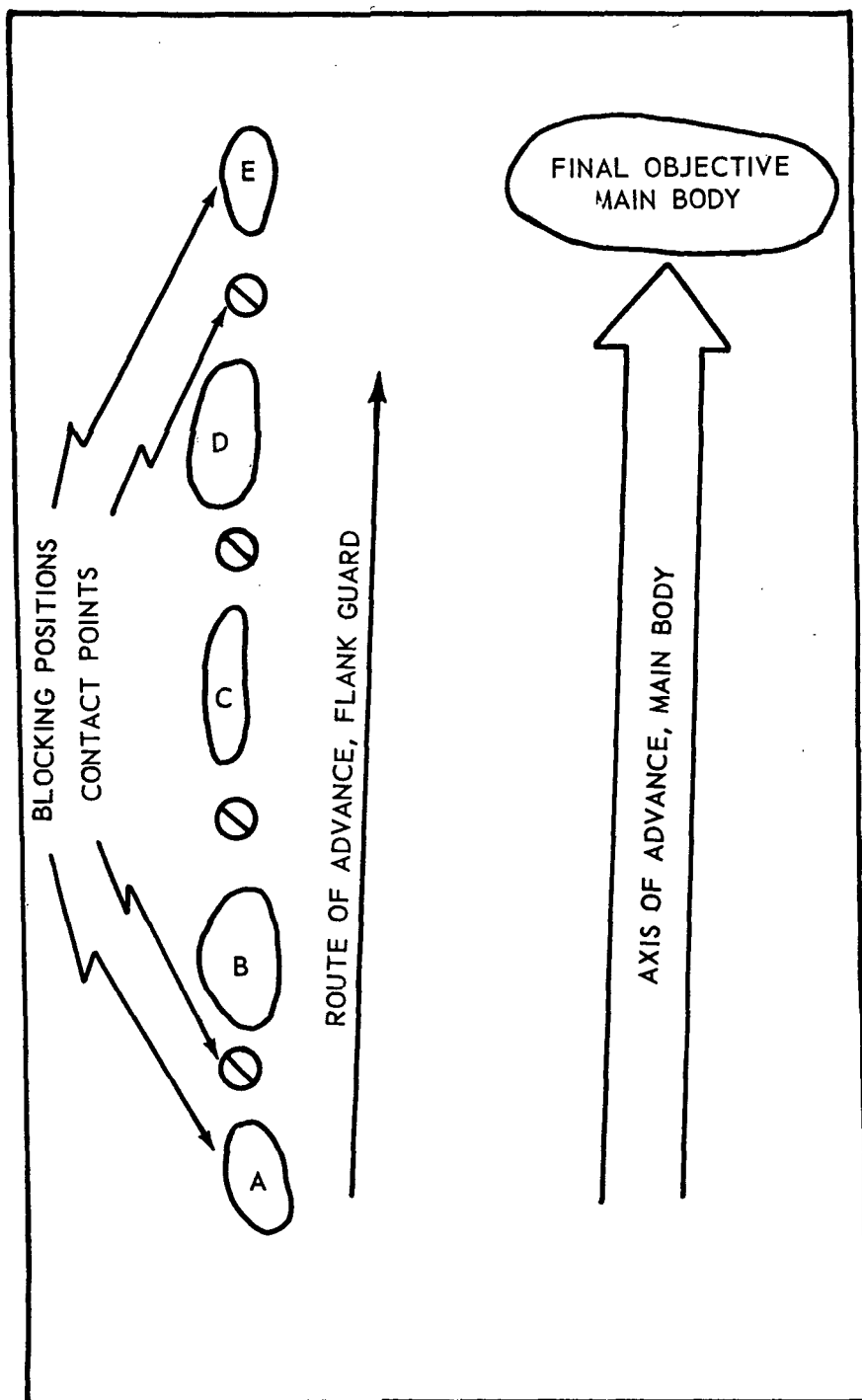


Figure 33. Planning for the employment of the armored cavalry troop as a flank guard.

tions and between these positions and the main body's axis of advance (fig. 33). If a suitable route does not exist, the troop may be required to operate cross-country.

*f.* The troop commander adopts a formation that will permit rapid employment against enemy resistance encountered. The formation must provide for the maximum flexibility of employment to meet any change in the situation. The formation that provides the best control and maximum flexibility is column formation. The troop must provide its own security. This is normally accomplished by requiring each platoon to provide security for its exposed flank. Scouts may be used for this purpose and to extend reconnaissance efforts. Maximum use is made of the short range ground radar during periods of reduced visibility.

### 173. Conduct of Flank Guard, Offense

*a.* The troop moves parallel to the axis of advance of the main body, regulating its movement by that of the main body. The leading platoon acts as the advance guard for the troop, secures the area between the main body and the blocking positions, and maintains contact with the rear of the leading element of the main body. Under certain conditions, the leading platoon may not be able to accomplish the three-fold mission of securing the troop route of advance, maintaining contact with the main body, and securing the area between the main body and the troop route of advance. In this situation, the troop commander employs an additional platoon or reinforces the leading platoon to ensure that the task can be properly performed (fig. 34).

*b.* The remainder of the troop marches in column, prepared to secure blocking positions on order. The decision to occupy these positions will depend on the speed with which the main body is advancing and the enemy situation on the exposed flank.

*c.* There are three basic methods of movement that the troop may employ to furnish the required flank protection: alternate bounds, successive bounds, and continuous marching. The method selected depends on the rate of advance of the main body and enemy situation on the flank.

*d.* If the assigned area is so extensive that the troop is unable to secure it, the troop commander should ask for permission to cover part of the area by screening or to be relieved of responsibility for the rear part of the area.

*e.* When the main body is stationary, the troop performing a flank guard mission may occupy blocking positions covering the likely avenues of enemy approach. The flank guard under these circumstances will normally conduct a delaying action.

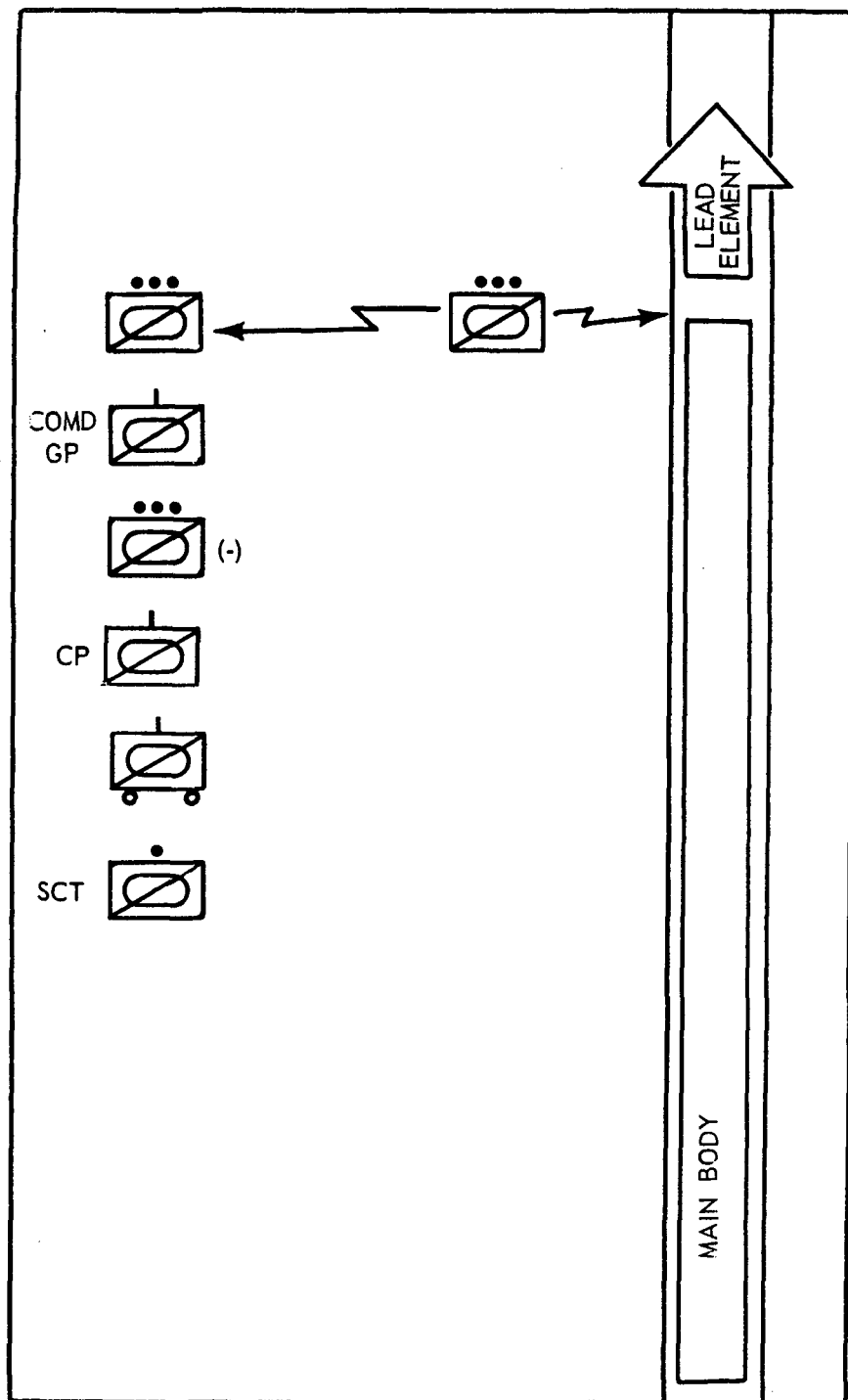


Figure 34. Armored cavalry troop employed as a flank guard, with one platoon maintaining contact with main body.

## 174. Flank Guard, Defense and Retrograde

a. The troop as flank guard for a defensive force occupies a series of strongpoints on the flank of the main body. The strongpoints are located on key terrain that dominates likely avenues of enemy approach into the sector. The troop is normally given a sector of responsibility, which is defined by specific terrain features. In the accomplishment of the mission, the troop employs defensive tactics. If forced from its positions, it employs delaying action techniques, obtaining time and space for the main body to react to the threat.

b. The operations of the troop as flank guard for a unit performing a retrograde movement are similar to those of a troop as flank guard for an advancing force. The major difference is that the area of responsibility is from the rear of the rear guard to the front of the first unit in the formation.

## Section IV. REAR GUARD

### 175. General

The rear guard is a security detachment that protects the rear of a column from hostile forces during an advance or withdrawal. The rear guard follows the main body at a distance prescribed by the main body commander and usually moves on the same route. It is prepared to intercept and engage enemy forces that constitute a threat to the main body. If attacked, the troop performing as rear guard employs delaying action in accomplishing its mission.

### 176. Planning for Rear Guard

a. When assigned a rear guard mission, the troop commander should analyze the terrain in the area of operations. He selects a series of delaying positions along the prescribed route of withdrawal. Depending on the terrain and existing road net, the troop may be required to withdraw on more than one route.

b. The troop commander must determine the number of platoons to be employed in the initial delaying position. If the situation permits, he may position one platoon in depth. In addition, he assigns a troop route of withdrawal and designates the control measures necessary to ensure effective control in the execution of the mission. The measures normally employed by the troop commander include delaying positions, phase lines, check points, contact points, and route of withdrawal.

c. The troop commander must plan for flank security and reconnaissance to the front and flanks of occupied delaying positions.

Active measures must be taken to ensure that the enemy does not bypass the rear guard and attack the rear of the main body. Plans may include the assignment of a reconnaissance mission to one or more platoons to reconnoiter a given area to the front or flanks of a position; however, the normal method is to assign the additional mission of protecting the flanks and extending reconnaissance to the platoon or platoons on the delaying position. The reconnaissance mission to the front and flanks is normally accomplished by scout elements operating under platoon control. Army aircraft can augment the effort of the platoons by extending observation to the front and flanks. At night and during periods of poor visibility, the organic short range ground radar set may be used to augment security to the front or flanks.

*d.* Frequently engineers are attached to or placed in support of the rear guard. The troop commander, together with the engineer unit leader, makes plans to construct obstacles to delay the enemy. When artillery support is available to the troop, the troop commander, in coordination with the artillery forward observer, develops the fire support plan for the operation. This fire support plan includes planned artillery fires, organic mortar fires, tactical air, and the fires of other organic weapons on each troop delaying position.

*e.* It is essential that liaison be maintained with the main body to regulate the rate of withdrawal of the rear guard. In addition, the rear guard commander must be thoroughly familiar with the plan of the main body and have continuous communication with the main body commander so that both commanders are informed of any situations that affect the withdrawal of the rear guard. A liaison agent, preferably the troop liaison sergeant, may be designated to accompany the main body to effect this liaison. Another solution is to have the necessary information relayed by the troop command post that may move close behind the main body.

*f.* Plans must include reconnaissance of successive delaying positions. The troop executive officer and such other personnel as can be spared from the security effort itself are used for this purpose.

*g.* The troop commander must plan for the movement and location of the troop command post vehicle and trains. The disposition of elements of the troop and the proximity of the main body will normally provide security for these elements.

## **177. Conduct of Rear Guard**

*a.* The troop as rear guard must be prepared to follow the main body by bounds, occupying successive positions or following the

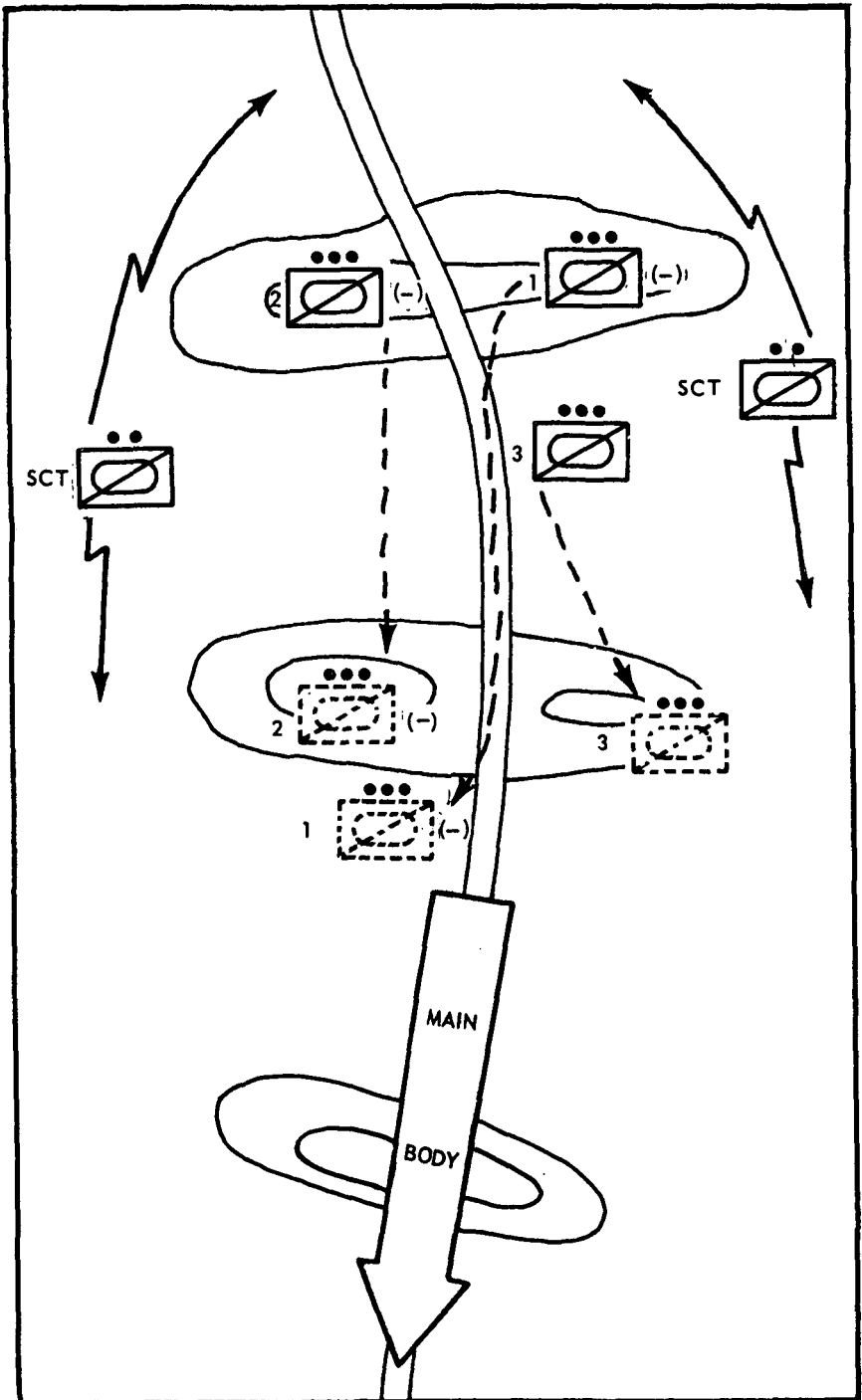


Figure 35. Conduct of a rear guard action by the armored cavalry troop.



main body by a prescribed time or distance interval. Normally, the rear guard moves by bounds behind the main body. It occupies each position, remaining there until the main body has cleared the next position. The distance between the rear guard and the main body should be such that the enemy cannot bypass the rear guard and attack the rear of the main body (fig. 35).

b. The rear guard engages all enemy forces that threaten the main body and fights to the extent necessary to ensure that the enemy does not impede the movement of the main body. The rear guard normally fights a delaying action, trading space for time until the main body has moved beyond the range of effective enemy action. Once contact with the enemy has been made, it should be maintained until the enemy is no longer a serious threat to the main body or has moved out of the area of responsibility.

c. If the main body is moving rapidly and no contact is made with the enemy, the rear guard moves at a given rate of march behind the main body. It regulates its speed to stay the prescribed distance behind the main body.

## Section V. COVERING FORCE

### 178. General

A covering force operates beyond the local security elements of the larger force. It may be employed when the main body is conducting offensive, defensive, or retrograde operations. Its mission is to give early warning, to develop the situation, to defeat hostile resistance within its capability, or to delay, deceive, and disorganize the enemy. It engages in any type of action necessary for the successful accomplishment of its mission, but usually conducts offensive or delaying actions. The covering force, however, must not become so engaged as to allow itself to be overcome or bypassed.

### 179. Troop as Part of Covering Force

a. The armored cavalry troop normally operates as part of the squadron on covering force missions. It may be required to participate in a covering force action as part of a combat command or battle group assigned a covering force mission. It can expect to conduct a covering force mission as part of the squadron when the division (armored or infantry) is engaged in a mobile or position defense or is conducting a retrograde movement. The troop of the armored cavalry regiment may also be part of a covering force when the regiment is assigned a covering force mission for a corps or army operation.

b. When the troop is employed as part of a covering force for an advancing unit, it performs reconnaissance within its assigned sector to locate enemy forces. When contact with the enemy is made, and orders so indicate, the troop attacks and destroys or disperses the enemy within its capability. An enemy force may be bypassed if stated in the mission or on order of the squadron commander. The armored cavalry troop may be assigned objectives as part of the covering force mission. The troop must adopt a formation that provides for rapid employment against enemy resistance.

c. The armored cavalry troop may be employed as part of a covering force for a unit conducting a defense or retrograde operation. The higher commander directing the covering force action will designate the general area in which it is to conduct its operations. In the defense, instructions will also include a general line beyond which the enemy is to be engaged. In a retrograde operation, the area in which the enemy is engaged is dictated by the interval at which the rear covering force is following the main body. In executing a covering force mission as part of a larger force, the troop is assigned a sector.

## Section VI. SCREENING FORCE

### 180. General

a. A screening force is a security detachment that protects an area or body of troops from surprise by observing and reporting enemy activity. A screening mission is assigned when a wide area requires security and there are few units available to perform the mission. The mission is accomplished by establishing observation posts and by patrolling to cover all approaches into the area. The width of the area to be screened is the primary consideration in determining the distribution of forces to accomplish the mission.

b. The mission of a screening force is to provide early warning of enemy approach and to maintain contact with the enemy. Forces disposed on a screening mission cannot be expected to offer significant resistance to the enemy. Screening forces are, however, expected to fight to protect themselves.

c. An armored cavalry troop may be assigned a screening mission (fig. 36). The scout elements, augmented by riflemen, establish observation posts and conduct patrols across the troop sector. The tanks and remaining riflemen are retained in positions behind the screening force for employment in limited offensive or defensive action in support of the screening element. The support squads are retained under platoon control.

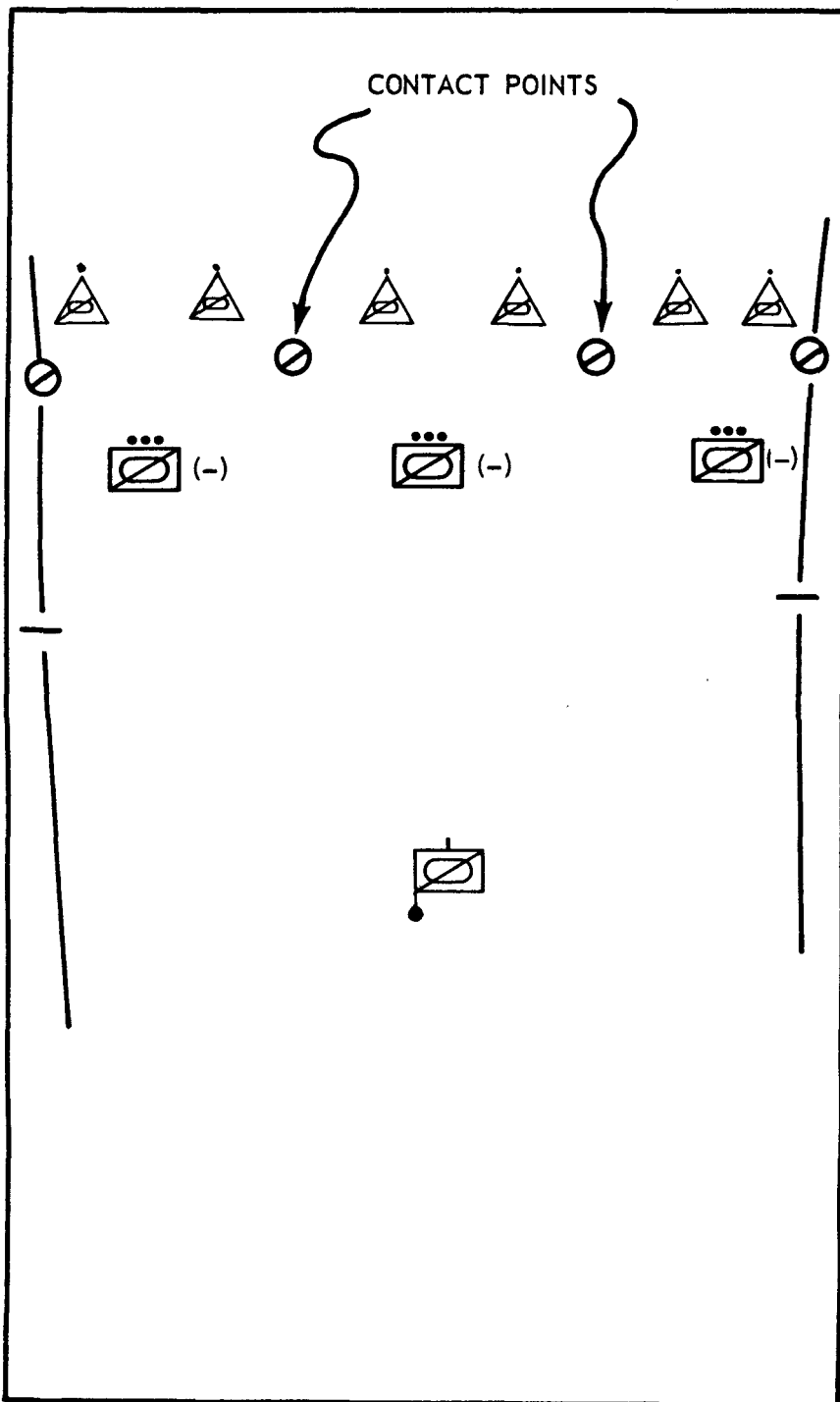


Figure 36. Armored cavalry troop deployed on an extended screening mission.

## 181. Planning for a Screening Mission

a. Upon receipt of a screening mission, the troop commander makes a map reconnaissance. The width of the sector assigned the troop and the amount of travel involved often preclude the troop commander from making a ground reconnaissance of the entire area. If an Army aircraft is available, he may make an aerial reconnaissance of the area.

b. Based on his reconnaissance, the troop commander makes his plan and assigns tasks to each platoon. He plans for the establishment of a series of observation posts and patrols to cover the entire troop sector by observation. Sectors of observation assigned to adjacent observation posts should be overlapping. Several sites for the short range ground radar are established and located on the map to permit rapid changes of position. In the event it becomes necessary to augment the observation posts with riflemen to cover an extended area, wheeled vehicles of the troop should be used to the maximum extent. Normally, high silhouette vehicles, such as tanks and armored personnel carriers, are not employed at the observation posts. The troop commander should locate the troop command post well to the rear for security and on high ground that provides good communication throughout the entire area.

c. Phase lines and check points may be used to control movement in the event the screen is forced to withdraw. Contact points may be designated between the observation posts to provide coordination.

d. If supporting artillery fires are available, the troop commander coordinates its use with the artillery forward observer. The fire support plan should include harassing fires on the enemy at defiles or other confining terrain features, and protective fires for observation posts and patrols.

e. Army aircraft may be used to extend observation to the front and flanks, to make periodic flights over sensitive areas, and to transport patrols. When electronic surveillance devices are employed by Army aircraft they increase the effectiveness of the screen, particularly during periods of poor visibility.

f. When the troop is operating as part of a larger force, the commander must effect the necessary coordination with adjacent units to ensure that the area between the two units is adequately covered by observation. The squadron commander will designate control and coordination measures to be employed.

## 182. Conduct of Screening Mission

a. Small enemy patrols that approach the screen may be permitted to infiltrate the line of observation posts. The observation post or patrol that observes an enemy force reports its location and progress. The observation post or patrol reporting the enemy usually remains hidden so as not to disclose its location. Tanks, infantry, and supporting fires are employed to destroy the enemy patrol or drive it from the sector.

b. When an enemy force posing a threat to the main body approaches the position, it is reported by the fastest means available. Every effort is made by the screening force to develop the situation and to obtain the strength, composition, disposition, and direction of movement of the enemy force. Once contact has been made, one or more observation posts may be assigned the mission of remaining in contact with the enemy. The remainder of the troop may reinforce the observation posts, with certain elements designated by the troop commander to move with the enemy and to report changes in the situation. When required, the entire troop may be ordered to withdraw to a new line of observation posts.

c. The troop commander should use all available fire support to harass and impede the progress of the enemy.

d. Once contact has been gained with the enemy, it must be maintained until the enemy moves out of the troop sector of responsibility. Enemy movement that may affect another unit must be promptly reported to higher headquarters.

## Section VII. REAR AREA SECURITY

### 183. Missions and Techniques

a. *General.* An armored cavalry troop may be employed alone or as part of a larger rear area security force that is protecting a unit, locality, or installation in the rear area from surprise attack, annoyance, or sabotage by enemy units, partisans, guerrillas, or airborne troops. The troop commander must carefully coordinate the efforts of the troop with those of other elements in the area.

b. *Securing Routes of Communication.* The techniques employed to guard routes of communication vary with the terrain, the road net, the length of the routes of communication, and the type of enemy activity expected. The following techniques form the basis for plans to secure routes of communication.

- (1) If the routes of communication to be secured extend only a short distance, platoons may be assigned areas of responsibility. Small security forces consisting primarily of scouts may be placed on dominating terrain features overlooking avenues of enemy approach. The troop commander should maintain as large a reserve as possible to counter any enemy threat that might develop in the troop area of responsibility.
- (2) If the routes of communication are long and must be guarded over a great distance, larger areas of responsibilities must be assigned to the platoons. Every effort must be made to ensure that both flanks of the route are covered by a series of observation posts. These observation posts have the mission of giving warning of enemy approach. The remainder of the troop is used to patrol the route of communication and to provide escorts for vehicles through the threatened area.
- (3) In employing either of the techniques discussed above, the troop commander may organize provisional platoons of scouts, tanks, and infantry to best accomplish the assigned mission. The scout elements are best used to man observation posts and for patrolling. They may be augmented by riflemen as required. The remainder of the troop is held in reserve to escort convoys and to counter any enemy threat.

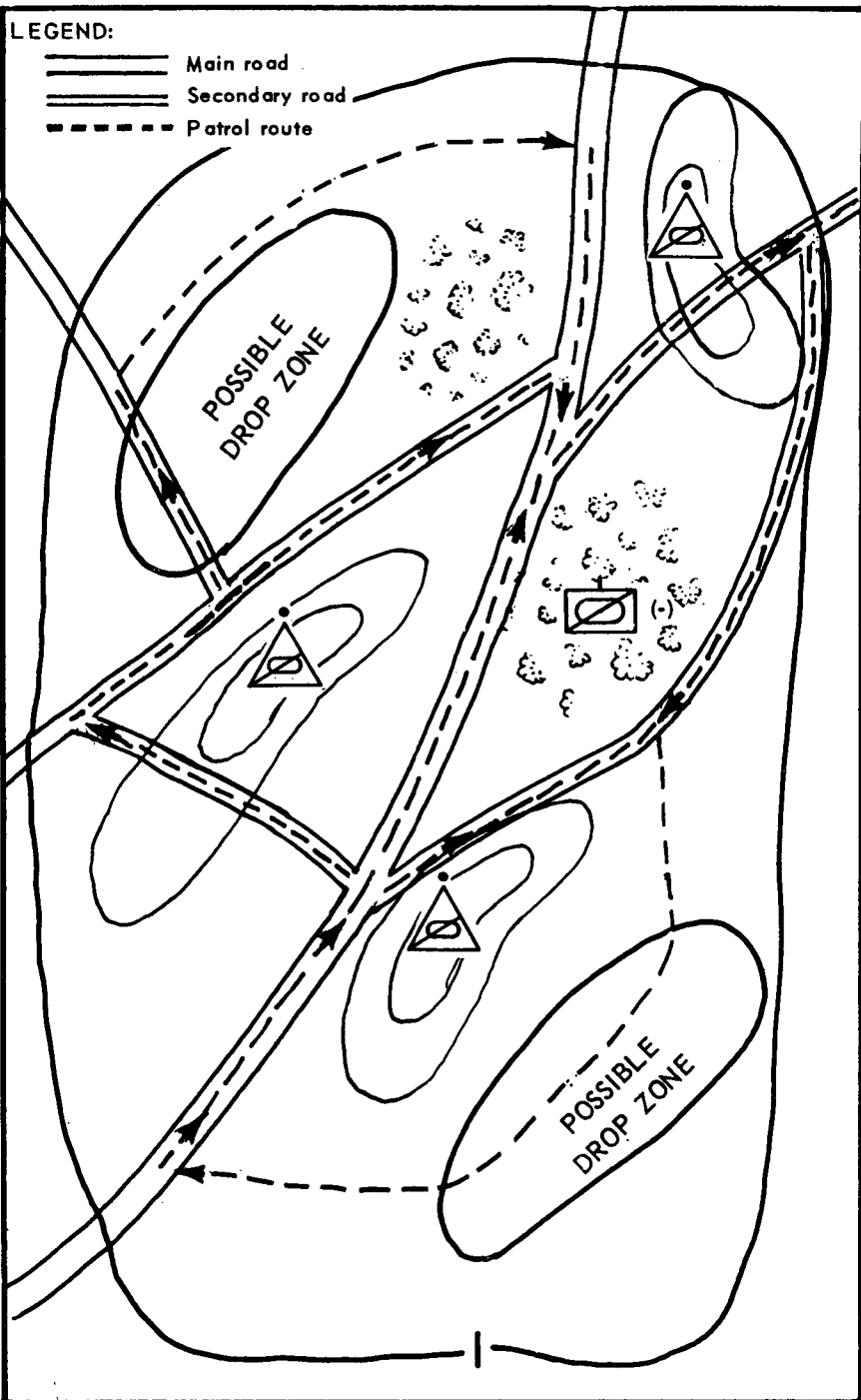
*c. Protecting an Installation.* The armored cavalry troop may be required to protect an installation in the rear such as a supply depot or a missile site. Elements of the troop are disposed generally as for a perimeter defense.

*d. Security Against Airborne, Air Landed, and Guerrilla Attack.*

- (1) When protecting a rear area against enemy airborne, air landed, or guerrilla forces, the commander deploys his troop by establishing observation posts that provide a good view of likely drop zones, landing areas, and areas where guerrilla forces may assemble, and by patrolling the entire area. The remainder of the troop is retained in a central location from which it is prepared to move rapidly to any portion of the troop area. See FM 31-15 for additional information on anti-airborne and antiguerrilla operations.
- (2) Upon being assigned a mission to defend an area against airborne, air landed, or guerrilla attack, the troop commander reconnoiters his area and selects likely drop

zones for airborne forces, landing areas for air landed troops, and potential assembly areas for guerrilla forces. From this he determines where to establish observation posts, routes for patrols, and a suitable assembly area for the troop striking force (fig. 37). Ground and air reconnaissance of the area is continuous.

- (3) The bulk of the tank strength, available riflemen, and the support squads form the centrally located striking force. Patrols are conducted and observation posts established primarily by scout elements. Riflemen may supplement the scouts as required.
- (4) The key to success against airborne or air landed forces is rapid deployment and the placing of maximum fires on the airborne forces during the early phases of the landing. Consequently, movement to attack any enemy force must be rapid.
- (5) Antiguerilla tactics include defensive actions to prevent or minimize the effects of guerrilla action, and offensive actions directed at destruction of guerrilla forces. Specific actions taken against guerrilla forces should be to detect them early, take them under fire, and rapidly counterattack to destroy them.



*Figure 37. Armored cavalry troop deployed for defense against an airborne threat.*



## CHAPTER 13

### OFFENSIVE OPERATIONS, ARMORED CAVALRY TROOP

---

#### Section I. GENERAL

##### 184. General

*a.* The armored cavalry troop when conducting offensive operations may attack to accomplish its assigned mission. The troop may attack alone, with reinforcements, or as part of the squadron. Frequently the attack must be made from march column to obtain the maximum effect with the least delay.

*b.* See FM 17-1 for a discussion of the purposes of the offense, fundamentals of attack, techniques of employing tanks and armored infantry, control measures, passage of lines, night attacks, and other offensive operations requiring additional considerations.

#### Section II. PREPARATION FOR THE ATTACK

##### 185. General

*a.* The troop commander receives his mission for the attack from the higher commander. In preparing for the attack, the troop commander alerts the troop by issuing a warning order, coordinates with adjacent and supporting units, plans and makes a reconnaissance, makes an estimate of the situation, formulates a plan of attack, and issues the order for the attack. He then checks the readiness of the troop to conduct the attack.

*b.* The armored cavalry troop usually completes preparation for the attack in an assembly area designated either by the squadron commander or the troop commander. Here the troop refuels, performs maintenance, and resupplies prior to launching the attack.

*c.* While the troop is in an assembly area preparing for the attack, the troop commander usually joins the squadron commander, or the commander of the unit to which attached, to receive the detailed operation order. He takes with him personnel needed to assist in planning the attack and, if necessary, a messenger. During the absence of the troop commander, the execu-

tive officer remains with the troop and, assisted by the platoon leaders and key noncommissioned officers, makes certain that the troop is readied for combat.

d. When the troop is involved in a meeting engagement and required to attack directly from march column, it attacks without benefit of the foregoing preparation.

## **186. Reconnaissance Before the Attack**

a. Before the armored cavalry troop is committed to an attack, the commander makes a map study, then, if time and means are available, a personal ground and aerial reconnaissance of the area of operations. If time does not permit a personal reconnaissance, the commander must rely on a detailed map study in planning the attack.

b. The troop commander arranges to have the platoon leaders accompany him or come forward to meet him at a specified time and place. It is normal for the troop commander to complete his own reconnaissance before meeting with his platoon leaders. If available, an artillery forward observer accompanies the troop commander on the reconnaissance and assists in planning the use of supporting fires.

c. During his reconnaissance, the troop commander determines:

- (1) Positions for supporting weapons in the troop base of fire.
- (2) The route for the maneuvering force to the objective.
- (3) When necessary, positions for tanks employed in an overwatching role.
- (4) Location of obstacles likely to hinder the advance.
- (5) Location of an attack position when required.

d. The troop commander should allow time for platoon leaders to make a ground reconnaissance of the area of operations following issuance of the troop order for the attack.

## **187. Estimate of the Situation**

a. The estimate of the situation by the troop commander is a continuous examination of all factors that affect the accomplishment of the mission. The commander uses the basic form for the estimate as a mental check list to ensure that he considers all pertinent factors before arriving at his decision as to which course of action to follow.

b. In making this estimate, the troop commander should consider the mission, enemy situation, terrain and weather, and troops available as each of these factors pertains to the particular situation.

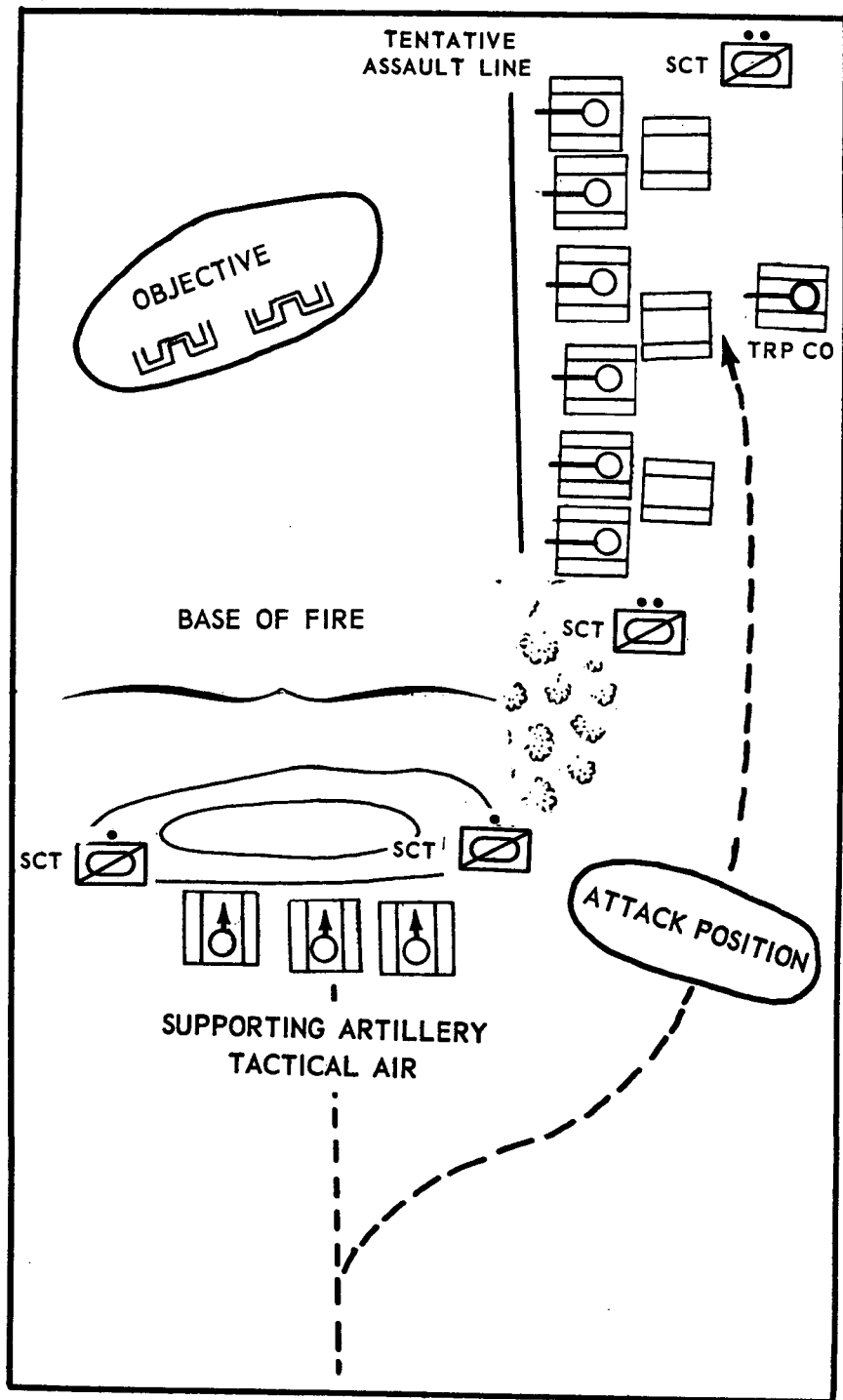


Figure 38. Distribution of forces, armored cavalry troop in a mounted attack.

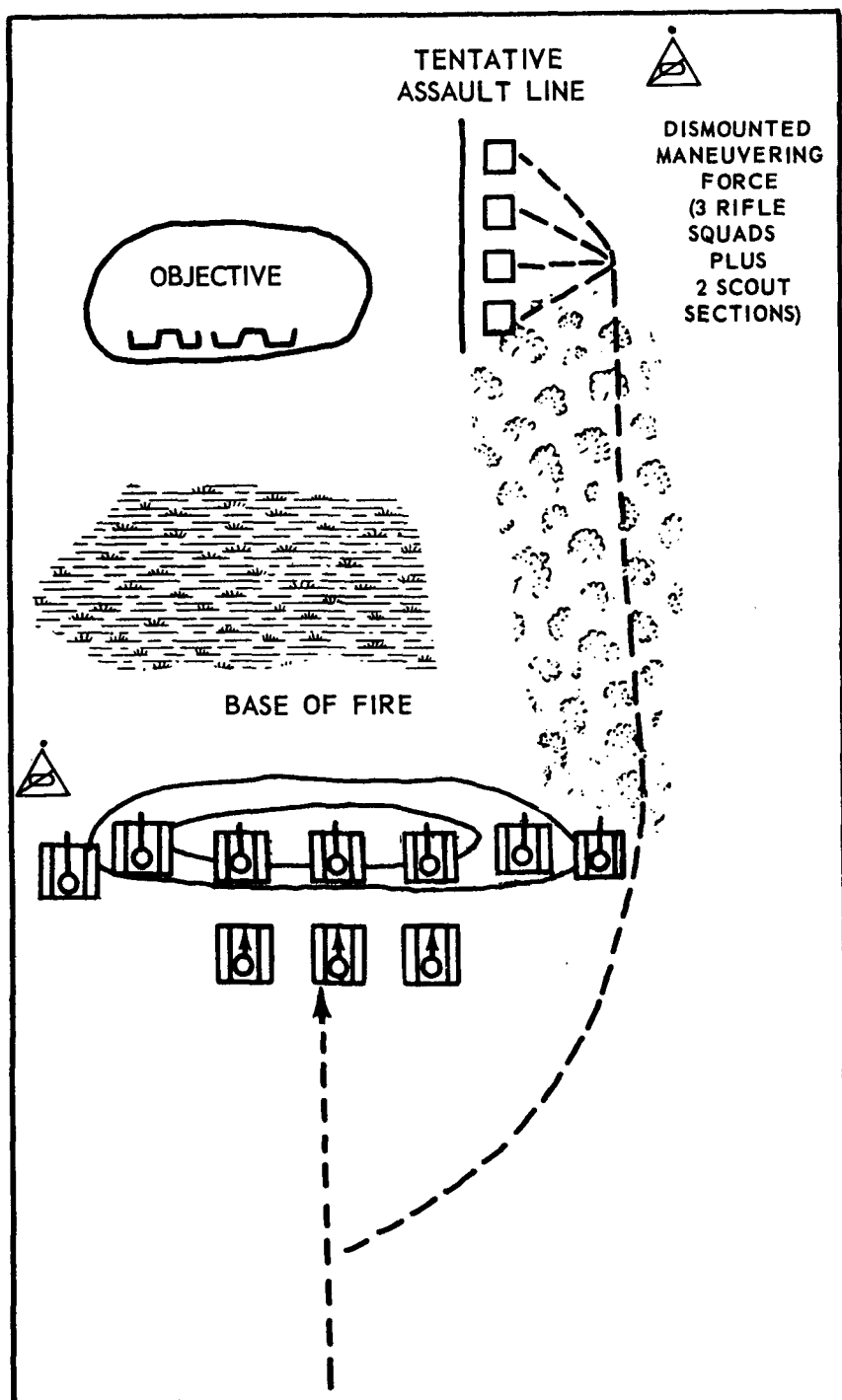


Figure 39. Distribution of forces, armored cavalry troop in a dismounted attack.

## 188. Plan of Attack

a. The plan of attack is designed to ensure teamwork and maximum coordination within the attacking forces throughout the operation (figs. 38 and 39). The plan must be simple but must cover all essential details. It includes the details of the *who*, *what*, *when*, *where*, and possibly the *how* and *why* of troop actions in carrying out the assigned mission.

b. The troop plan of attack consists of the plan of maneuver and the fire support plan.

(1) The plan of maneuver includes the composition of the maneuvering force, the route it will follow to the objective, and its method of advance.

(2) The fire support plan includes the location and composition of the base of fire, targets to be fired on, and signals for lifting or shifting the fires.

c. The plan of attack will include provisions for security during the attack, for consolidation of the objective, for reorganization after the attack, and for resumption of the advance, if appropriate.

## 189. Formation for the Attack

The armored cavalry troop may attack in either of the two basic combat formations, column or line, or in a variation thereof (fig. 32). A detailed discussion of combat formations is contained in FM 17-1.

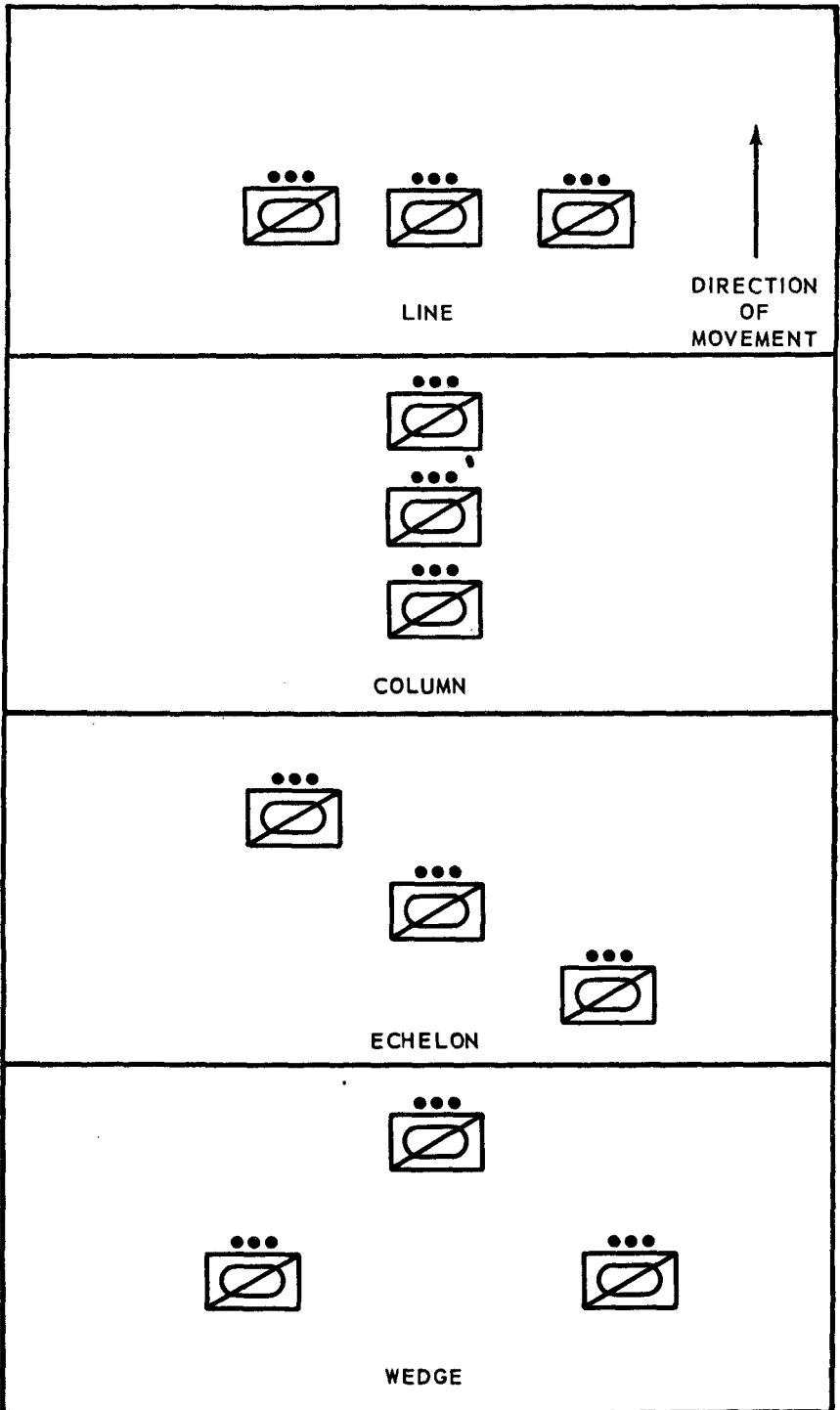
## 190. Maneuvering Force

a. The troop may comprise all or part of the maneuvering force during an attack conducted by a larger unit. When required to execute an independent attack, the troop will provide elements for both the maneuvering force and the base of fire.

b. When possible, tanks and mounted infantry should be employed in the maneuvering force as tank-infantry teams.

c. Because of the lack of armor protection, scouts are not normally employed in the mounted maneuvering force to close with and destroy the enemy; however, they may be employed to provide flank security for the maneuvering force. On occasion, scouts may be employed as riflemen and may be transported with the rifle squads in armored personnel carriers.

d. If the terrain or obstacles prohibit the use of vehicles, the maneuvering force will consist of dismounted rifle squads and possibly personnel from the scout sections. When scouts are so employed, they should be formed as rifle squads.



*Figure 40. Armored cavalry troop in offensive formation.*

e. The troop commander may employ one of several combinations of his platoon elements to constitute his maneuvering force when executing an independent attack:

- (1) Tank-infantry teams, consisting of two tanks and one rifle squad each.
- (2) A provisional tank platoon of six tanks.
- (3) A provisional rifle platoon of three rifle squads.

f. Provisional groupings of tanks, infantry, and scout elements are commanded by the platoon leaders, other key personnel designated by the troop commander, or as covered in the unit SOP.

### **191. Base of Fire**

a. The base of fire for the armored cavalry troop during an attack may consist of supporting artillery or tactical air in addition to organic firepower. The nucleus of the base of fire for the troop is provided by the three organic mortars. They are grouped under troop control whenever they can effectively support the troop attack. Scout elements may be used in the base of fire to furnish automatic weapons firepower or to provide security. Tanks may also be used in the base of fire, when the maneuvering force is required to attack dismounted or when sufficient firepower is not available from other sources.

b. The troop commander usually designates the executive officer or a platoon leader to control that part of the base of fire provided by organic elements of the troop.

### **192. Operation Order**

The troop order for the attack is usually issued orally by the troop commander to his assembled key subordinates. It should be brief, clear, and complete. To insure completeness, the troop commander should follow the established form for an operation order. It will normally be issued from a vantage point overlooking the area of operations, thus precluding the possibility of misunderstanding by the recipients. If the situation or time precludes issuing the order at a terrain vantage point, the troop commander may issue the order in the assembly area or at any other convenient location.

### **193. Supervision of Preparation for Attack**

Supervision by the troop commander, platoon leaders, noncommissioned officers is a continuing process. All officers and noncommissioned officers must actively supervise the actions of their subordinates to ensure that their units are fully prepared for the operation. Detailed attention must be given to such mat-

ters as supply, maintenance, communication, and dissemination of information contained in the plan of attack.

#### **194. Movement From Assembly Area to Attack Position**

a. Movement from an assembly area to the attack position, when used, is made as a tactical march. The troop order of march should be planned to simplify movement into the attack position. When the troop commander is on reconnaissance or otherwise not available, the executive officer will march the troop to the attack position.

b. The troop may march as part of a larger unit or independently. In either instance, it will provide its own security on the march and in the attack position.

#### **195. Attack Position**

a. When an attack position is used by the armored cavalry troop, it is occupied for a minimum time. Every effort must be made to move into the area, deploy, and cross the line of departure without halting.

b. When the troop is required to halt in the attack position, the troop commander should insure that:

- (1) Local security is established.
- (2) Elements of the troop are adequately dispersed.
- (3) Available cover and concealment are used.
- (4) A final inspection of the readiness of the unit is made.
- (5) Revisions to orders are issued as necessary.
- (6) Readiness of the troop is reported to higher headquarters.

### **Section III. CONDUCT OF THE ATTACK**

#### **196. General**

As the attack progresses, unforeseen circumstances may make it necessary for the troop commander to change his plan of attack. He must exploit favorable developments without hesitation and must overcome obstacles as quickly as possible. The most effective way to meet changing situations, with minimum change in the plan of attack, is to use any uncommitted portion of the troop or to shift the supporting fires.

#### **197. Conduct of Maneuvering Force**

a. The troop maneuvering force must close on the objective in the shortest possible time. This force should be committed over



terrain that is favorable for rapid movement toward the objective. Available cover and concealment should be used to gain surprise and to reduce vulnerability. The maneuvering force attempts to reach the objective by continuous movement; however, when the situation requires, fire and movement must be executed by elements of the maneuvering force. Aggressive action is the keynote to successful action by the maneuvering force.

b. In a mounted attack, the maneuvering force will normally consist of tank and infantry elements. In a dismounted attack, the maneuvering force consists primarily of infantry.

## **198. Conduct of Base of Fire**

a. The base of fire is prepared to furnish continuous fire support to the maneuvering force from the beginning of the attack. Initially fire is directed on the objective and other enemy-held areas that can retard the advance of the maneuvering force. As the maneuvering force approaches the objective, and the fires of the base of fire are masked, it may lift or shift its fires. If the assaulting force consists of tanks and mounted infantry, the base of fire may continue to place overhead fire or airbursts on the objective until the infantry dismount.

b. Elements in the troop base of fire prepare to displace forward as the maneuvering force moves onto the objective. The movement forward by elements of the base of fire will be on order of the troop commander. It is important that all elements of the base of fire do not displace forward at one time. Mortars should be displaced forward in such a manner that adequate firepower is always immediately available.

## **199. Assault on Objective**

In the armored cavalry troop, the assault is made with tanks and infantry abreast, with tanks leading closely followed by infantry, or with dismounted infantry leading closely supported by tanks. Whichever method is used, the tanks destroy enemy troops, defensive works, weapons, and emplacements by direct fire. The riflemen close with and destroy the enemy in close combat and protect the tanks from individual antitank weapons. As the maneuvering force closes on the objective, supporting fires increase their volume of fire. These fires are shifted to isolate the objective just before the infantry dismount and the assault begins. The shift of supporting fires should be timed to permit the maneuvering force to launch the assault without halting. As the assault begins, the tanks advance across the objective, firing their main armament and machineguns. Armored personnel car-

rier machineguns may be used to provide additional firepower during the assault. Riflemen and automatic riflemen use assault fire as they advance and close with the enemy. The tanks continue their movement across the objective while the dismounted infantry mop up.

## **200. Actions on Objective**

*a.* Immediately upon taking the objective, the troop deploys to repel a counterattack according to the plan announced in the troop operation order. The troop commander makes prompt adjustments to fit the circumstances. He orders the mortars and other organic weapons in the base of fire to displace forward by echelon and places them to cover by fire possible avenues of enemy approach to the front or flanks of the objective. He uses available supporting artillery and tactical air to reinforce his position against hostile counterattacks.

*b.* The troop may be required to remain on or in the vicinity of the objective and defend it or continue the attack. If the troop is required to remain on the objective for some time, the personnel carriers and wheeled vehicles are placed in covered positions so located as to be immediately available. If the attack is to continue, vehicles may remain under squad or section control. Tanks and other vehicles are resupplied without delay. Necessary logistical support is provided by the troop combat trains.

*c.* After elements of the troop are deployed to repel a counterattack, reconnaissance is begun for a continuation of the attack. At the same time, reorganization of the troop takes place. Casualties are evacuated and personnel are redistributed as necessary. The unit situation, strength, and vehicle and ammunition status are reported to higher headquarters. Prisoners may be briefly interrogated for immediate tactical information and are sent to rear collecting points as quickly as possible.

## **201. Continuation of Attack**

*a.* The armored cavalry troop commander should have a complete picture of the overall plan of the next higher commander and make a continuous estimate of the situation. If the plan calls for a continuation of the attack, the troop is deployed on the objective to facilitate resumption of the advance. If this procedure is followed, only brief oral orders will be required to continue the attack.

*b.* The enemy may attempt to hold his position until night and conduct his withdrawal under cover of darkness. The troop must

maintain constant pressure to ensure that contact with the enemy is maintained, the enemy is kept off balance, and his withdrawal from action made difficult.

## **202. Actions of Troop Commander During Attack**

*a.* During the attack, the troop commander locates himself where he can best influence and control the actions of his forces as a whole. He will normally accompany the maneuvering force, placing himself where decisive action is likely to develop, normally in the vicinity of the lead elements. He usually rides in the tank organic to the troop headquarters. This enables him to accompany the assault elements and to maintain visual or radio contact with elements of the troop and supporting elements. In a dismounted attack, he should not become so involved with the actions of a subordinate element that he cannot effectively direct the employment of the remainder of his force. During the attack, use of visual signals will aid in maintaining control.

*b.* During an exploitation or other rapidly moving offensive operations, the troop commander should be located near the head of the column, or immediately behind the assault platoons when the troop deploys.

*c.* Throughout the attack, the troop commander must keep the squadron or other higher headquarters informed of the situation.

## **203. Employment of Troop as Part of a Larger Force**

The armored cavalry troop may participate in offensive action as a part of a larger force. The troop may be employed in the base of fire, as part of the maneuvering force, in a security mission associated with the attack, or initially as an uncommitted force prepared to exploit the success of the assaulting force.

## **204. Use of Helicopters in Troop Attack**

Scouts and rifle elements may be transported by helicopters during the conduct of an attack (par. 269). See also airmobile operations in FM 17-1.

## CHAPTER 14

### DEFENSIVE OPERATIONS, ARMORED CAVALRY TROOP

---

#### 205. General

*a.* The armored cavalry troop may be required to engage in defensive combat in the performance of normal reconnaissance and security missions. Additionally, as an economy of force, the troop may be required to organize the defense of a specific area, terrain feature, or installation in accordance with the overall plan of defense of a larger unit.

*b.* The troop is most effectively employed in the defense when it is assigned reconnaissance or security missions for a larger unit.

*c.* For additional discussion of small armor units in the defense, see FM 17-1.

#### 206. Employment of Armored Cavalry Troop in Defense

*a.* The armored cavalry troop may be employed in defensive operations either alone or as part of a larger force. When part of a defensive action by a larger unit, the troop may participate in the mobile defense or position defense.

*b.* In the mobile defense, the troop is best suited for employment with the security force because of its mobility and excellent means of communication. It may perform a reconnaissance or security mission for the striking force. Normally, the least desirable employment of the troop is as part of the fixing force.

*c.* In the position defense, the troop may be employed with the security forces, the forces in the battle area, or the reserve.

*d.* When required to defend alone, the troop will usually adopt a perimeter defense and employ techniques common to both the mobile and the position defense.

#### 207. Organization of the Ground for Defense

Measures for increasing the effectiveness of defensive fires and permitting maneuver by elements of the troop take precedence over other actions in organizing an area for defense. The defensive position is organized to permit delivery of a large volume of

accurate fire on the enemy while reducing the effects of his fires and impeding his advance.

## 208. Reconnaissance and Selection of Position

The assignment of a defensive position to the armored cavalry troop is normally the responsibility of the squadron. Once assigned a sector to defend, the troop commander reconnoiters his assigned area to find the likely enemy avenues of approach into the troop sector. In selecting a position, the troop commander analyzes the terrain with particular emphasis on observation and fields of fire, cover and concealment, obstacles, accessibility of positions, and communication.

## 209. Occupation of the Defensive Position

a. Based on the results of his reconnaissance and on all other information available, the troop commander positions his platoons.

b. After making his estimate of the situation, the commander may employ each of his platoons intact. The nucleus of each platoon defensive position is the tank section and armored rifle squad. If there are two enemy avenues of approach into the troop sector, the troop commander may employ two platoons forward to block the avenues of approach and position the third platoon in depth. The troop commander may employ the mortars and scouts from each of the platoons directly under troop control. If the mortars can be massed to support the actions of all elements of the troop, their firepower increases the defensive capability of the troop. The scout sections operating under troop control may be used to provide local security by manning observation posts and by conducting patrols in the troop area (fig. 41). On occasion the troop commander may elect to organize three provisional platoons—tank platoon, infantry platoon, and scout platoon, with the support squads employed under troop control. In this situation, the provisional tank platoon will be employed to cover the most likely avenue of enemy armor approach and the provisional infantry platoon disposed to provide protection for the tanks and to cover other likely avenues of enemy approach. The tanks are seldom, if ever, employed alone. The tanks and rifle squads are employed as a team. The scout elements are used to establish observation posts and to patrol the areas between platoons of the troop or between the troop and adjacent units. The short range ground radar may be employed by the platoon covering the most critical avenue of approach or, under troop control, to augment observation posts manned by scout sections.

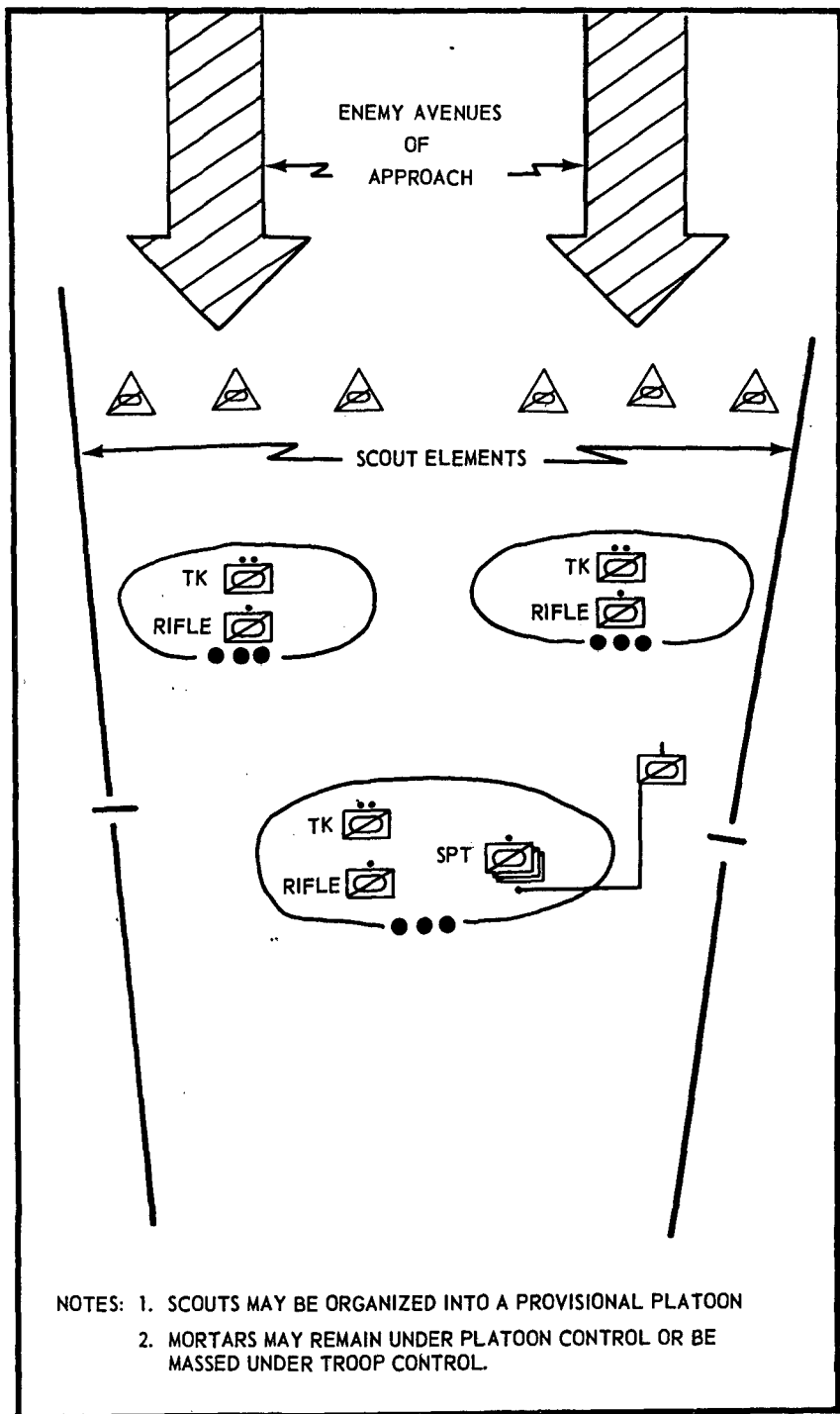


Figure 41. Schematic diagram of the armored cavalry troop in defense.

c. When the organization for combat is complete, the defensive position is occupied, and the platoons immediately organize the ground for defense. Fields of fire are cleared, tanks are placed in hull defilade, and emplacements are dug for crew served weapons. The firepower of the machineguns on the armored personnel carriers are usually integrated into the all-round defense of the troop. Since the mission of the troop normally requires that it remain mobile and be prepared to move on short notice, armored personnel carriers should be employed in or near the areas of the rifle squads they transport. Because of their relatively high silhouette and vulnerability to certain types of enemy fire, it is usually necessary to place the majority of the carriers in defilade to the rear of the position, with provision for moving them, as the situation develops, to previously selected firing positions.

## 210. Strengthening the Defensive Position

a. Strengthening of the defensive position is continued as long as it is occupied. The armored infantry and scout elements can perform limited pioneer work to improve the position.

b. Full advantage must be taken of natural obstacles in the area. Other obstacles are created to impede the advance of the enemy. Barbed wire, mines, and other obstacles are placed to break up the enemy attack and hold him in areas covered by defensive fires. Obstacles are placed to be inconspicuous from ground and air observation, and so that direct fire can prevent their removal or neutralization by the enemy.

- (1) Protective obstacles, such as barbed wire, trip flares, noise makers, and antipersonnel mines (as authorized) are located to prevent surprise. The distance from the unit to the obstacle must permit day and night observation, yet prevent the enemy from effectively using hand grenades.
- (2) The use of antitank mines is coordinated with the use of other obstacles and antitank weapons. Antitank mines are laid forward of the defensive position to connect or extend other obstacles and to canalize enemy armor into areas where antitank fire is most effective. To guard against removal, these mines are surrounded by antipersonnel mines and covered by small arms fire. When part of the division barrier plan, toxic chemical mines may be integrated with HE mines or other obstacles for the purpose of making breaching operation more difficult.

c. Obstacles must not be created in areas where they will hamper the movement of other friendly forces. Their use must be consistent with the overall plan of defense. Engineers, usually controlled and coordinated by higher headquarters, will normally assist in establishing minefields and in the construction of other obstacles. The armored cavalry troop must, however, expect to do much of this pioneer work, and personnel of the troop should be trained accordingly.

d. Dummy works, in accordance with the overall plan of defense initiated at higher headquarters, may be used to mislead the enemy and disperse his fire. To be effective, dummy positions must be realistic. They should be located near occupied positions, yet not so close that fire intended for the dummy position interferes with actions of troops in an actual position. For further deception and increased effectiveness, dummy positions may be lightly manned during the preliminary phase of the defensive action while the enemy is attempting to determine the extent and strength of the position by air and ground reconnaissance. Examples of deceptive techniques that may be employed include:

- (1) Installing phony minefields (as authorized), including some boobytraps and live mines, to inflict casualties and to force the enemy to make a cautious and thorough search of the area.
- (2) Spreading canvas strips, straw, foliage, or similar material to cover sections of the road leading into the defensive position. Some of these may conceal ditches, mines, or boobytraps while others do not conceal anything.
- (3) Concealing antitank mines in felled trees or other debris blocking a road. When a tank attempting to break through is stopped within the obstacle, it improves the obstacle.

## 211. Armored Cavalry Troop in Mobile Defense

a. *General.* The armored cavalry troop may be employed as part of any element of the mobile defense: the security force, fixing force, or striking force.

b. *Security Force.*

- (1) The armored cavalry troop may act as part of the squadron in covering force actions, or as part of the squadron, or independently, in rear area or flank security operations. It may be required to conduct patrols or to man observation and listening posts.



- (2) The troop normally participates as part of the squadron in the execution of a covering force mission in the mobile defense and will be assigned a sector of the initial squadron position. The troop conducts this type of mission generally as explained for the delaying action.
- (3) The armored cavalry troop may be assigned an independent security mission in the mobile defense when attached to a combat command or battle group. Under these circumstances the troop may be given a mission comparable to that of a covering force, and it may employ the techniques of a covering force, in which case suitable reinforcements should be provided.
- (4) If the troop is assigned a flank security or rear area security mission in the mobile defense, it conducts the mission as described in paragraphs 179 and 183.

*c. Fixing Force.* Although employment as a fixing force is the least desirable in the mobile defense, when the armored cavalry troop is assigned such a mission, the squadron commander will designate to the troop commander the general trace along the forward edge of the battle area to be occupied by the troop, and the strongpoints that the troop is to be prepared to occupy on order. As soon as possible, the troop commander initiates a reconnaissance of his area to develop his plan of defense. He positions the platoons to provide long range fires and to insure mutual fire support (fig. 42). The troop is organized for combat based on the factors of METT. No reserve is held at troop level although, if the situation permits, one platoon should be positioned in depth. Since the enemy may resort to infiltration tactics, the position must be organized for all-round defense. The fire support plan is developed, range cards are prepared for all tank and automatic weapons, and overlays showing the organization of the troop sector are prepared and submitted to the squadron commander. The troop command post vehicle and combat trains are positioned to the rear, preferably near the platoon positioned in depth.

*d. Striking Force.* The armored cavalry troop may be employed as a part of the striking force, usually after it has performed a security mission and has withdrawn through the combat elements in the forward defensive area. The preparation and conduct of the operations of the striking force are similar to those of normal offensive action. When participating as part of the striking force, the armored cavalry troop is best suited for reconnaissance and security missions.

## 212. Armored Cavalry Troop in Position Defense

*a. General.* In position defense, the troop may be employed in

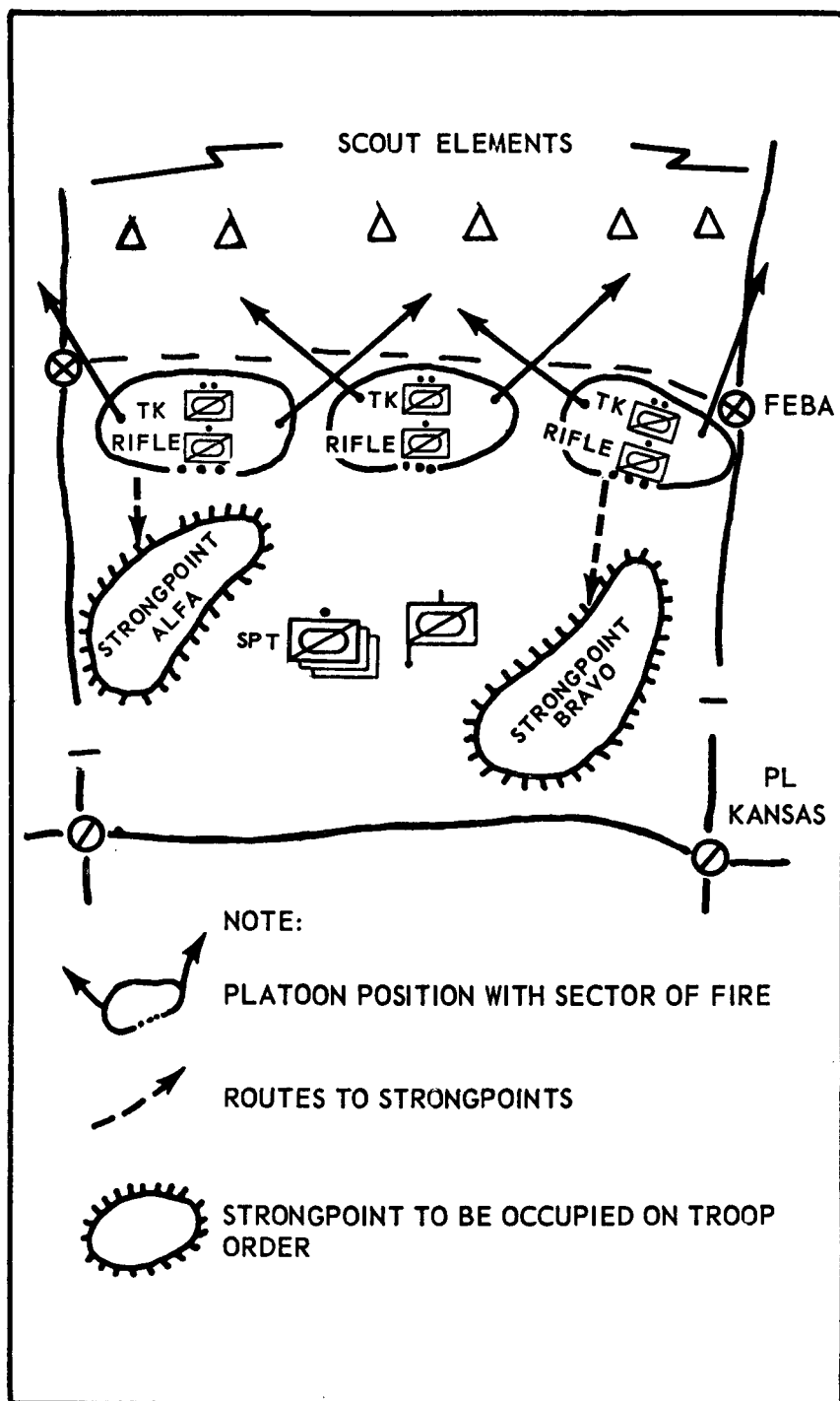


Figure 42. Armored cavalry troop occupying a fixing force position.

one or more echelons of the defense: security force, forces in the battle area, or reserve. The troop is most effective when it is assigned missions where it can use its mobility and extensive means of communication to the maximum. These missions include:

- (1) Participating as part of a covering force or general outpost for a larger unit.
- (2) Acting as the combat outpost for a combat command or battle group.
- (3) Acting as part of the reserve for a larger unit.

*b. Combat Outposts.* For a general discussion of the functioning of the general and combat outposts see FM 17-1.

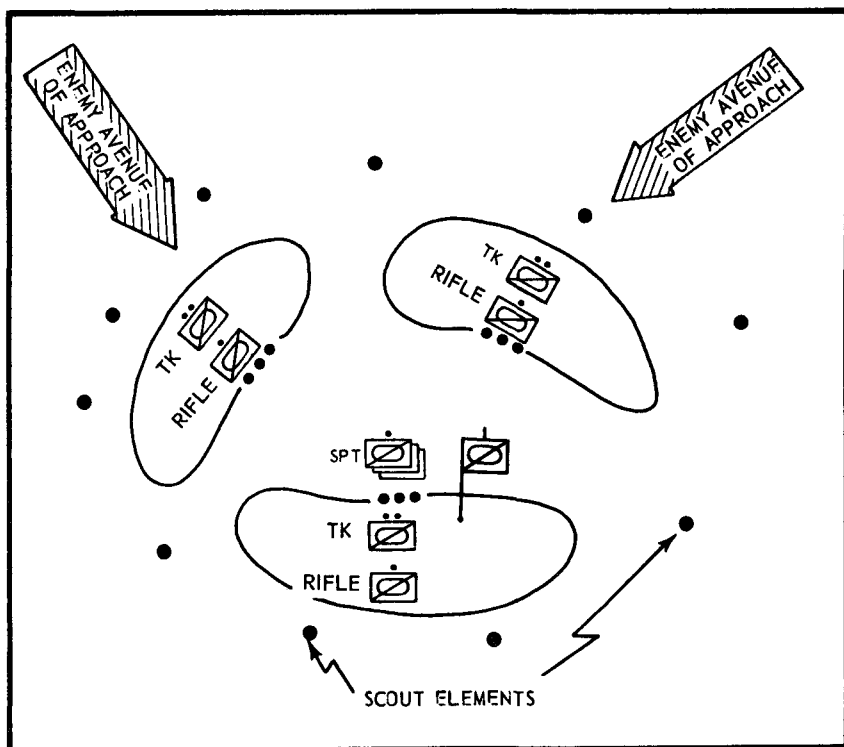
*c. Armored Cavalry Troop as Part of Reserve in Position Defense.*

- (1) The armored cavalry troop may frequently be employed as part of the reserve in the position defense. The troop is best suited to perform reconnaissance and security missions for the reserve of a larger force.
- (2) The troop commander studies the plans of higher headquarters for employment of the reserve, reconnoiters the area, and prepares necessary plans. He may organize the troop to concentrate tank-armored infantry strength or employ the troop without any change in organization. Platoon and section leaders reconnoiter routes to, and areas of, planned operations.

*d. Armored Cavalry Troop as Part of Forces in the Battle Area.* The troop should not be employed independently to hold a portion of the forward edge of the battle area; however, it may be assigned a sector on the forward edge of the battle area when the squadron is performing an economy of force mission. When assigned this mission, the troop should be given a narrow sector consistent with its capability to fight a defensive action.

### 213. Armored Cavalry Troop in Perimeter Defense

Employment of the armored cavalry squadron will usually result in operations over a relatively wide area. When the squadron is required to halt, it will not often be feasible to establish a squadron defensive position. Under these circumstances or when operating independently, the troop must provide for its own all-round defense (fig. 43). The troop commander deploys his platoons to cover likely enemy avenues of approach and establishes his own local security, using scout elements. Frequently, when the troop adopts a perimeter defense, time and circumstances will



*Figure 43. Perimeter defense by the armored cavalry troop.*

not permit extensive organization of the position. The troop commander should ensure that the platoon leaders employ their tanks to cover the most likely enemy avenues of armor approach and their riflemen to provide close-in protection for the tanks and to cover the other likely avenues of enemy approach. If attacked, the troop employs normal defensive tactics. The troop commander may employ an unengaged platoon as a reserve. For security, the troop headquarters will usually be positioned in the center of the area or in the vicinity of the area occupied by one of the platoons.

#### **214. Armored Cavalry Troop Protecting an Installation**

The armored cavalry troop may be required to protect an installation in rear areas, such as a supply installation or an element of the nuclear weapons delivery system. Elements of the troop are deployed generally as in a perimeter defense (fig. 44). The troop commander provides for early warning of enemy approach by establishing an OP system around the installation, by continuous patrolling, and by aerial surveillance when aircraft

are available. Additionally, use of the short range ground radar set organic to the troop will improve security, especially during periods of poor visibility. The troop commander should maintain a tank-heavy reserve in the vicinity of the installation to employ against any hostile force that approaches the position. He may group the mortars under troop control to provide fire support.

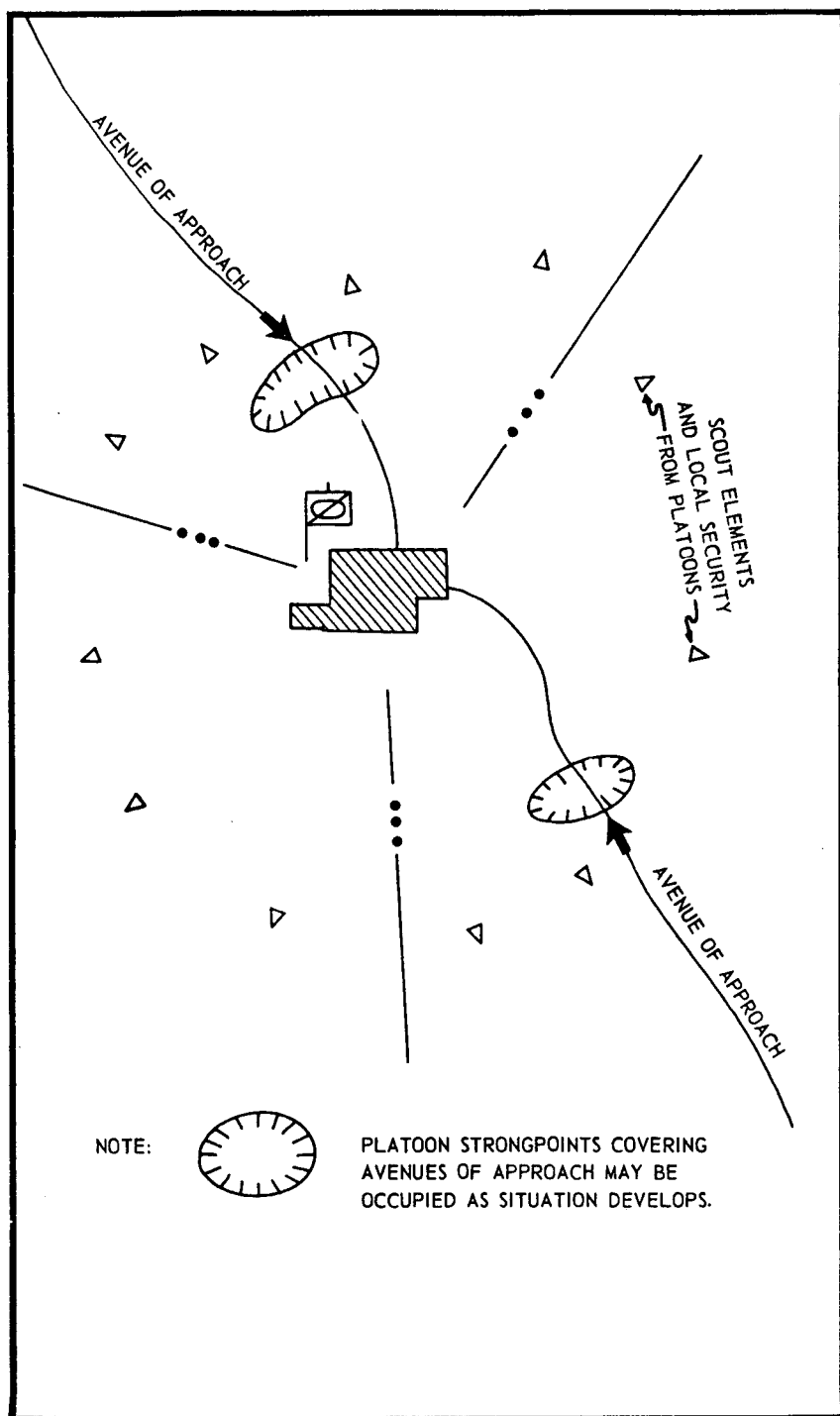


Figure 44. Armored cavalry troop protecting an installation.

## CHAPTER 15

### RETROGRADE OPERATIONS, ARMORED CAVALRY TROOP

---

#### Section I. DELAYING ACTION

##### 215. General

*a.* The armored cavalry troop may be required to conduct a delaying action in order to accomplish an assigned mission. The troop may conduct this action as a separate unit or as part of a larger force.

*b.* A detailed discussion of the characteristics of delaying positions and the principles of the preparation for and conduct of the delaying action, are contained in FM 17-1.

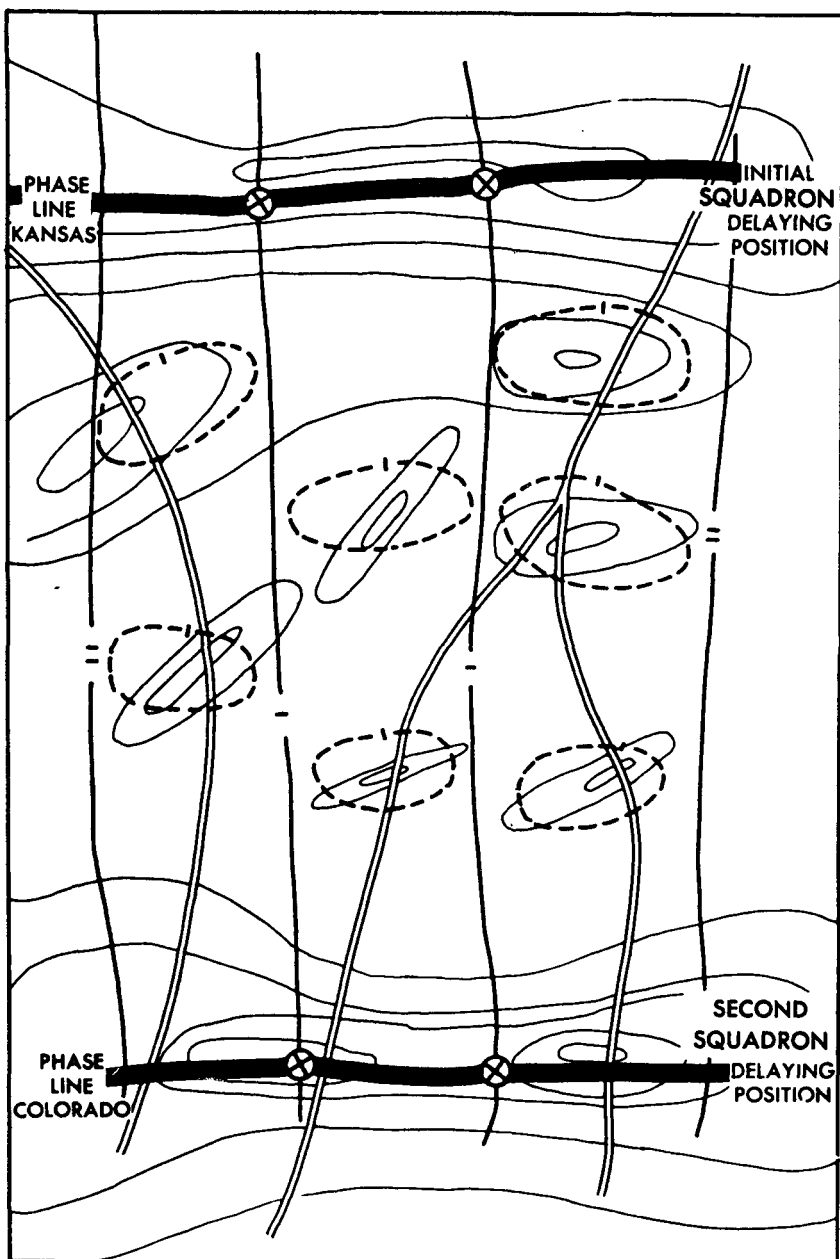
##### 216. Reconnaissance and Selection of Delaying Positions

*a.* Higher headquarters normally assigns the troop a zone in which to conduct delay, and specifies the general area of the initial and successive delaying positions, and the length of time required to hold the enemy forward of each designated position. A reconnaissance of designated positions and to select additional positions should be made as soon as possible and should be as thorough as time permits. In selecting delaying positions, the troop commander should consider the same factors as those considered in selecting a defensive position and, in addition, should select routes suitable for withdrawal.

*b.* The troop commander should select intermediate platoon delaying positions between those selected by higher headquarters as the terrain allows (fig. 45). If the area of operation has sufficient depth, successive delaying positions should be spaced far enough apart to force the enemy to deploy to attack each position and to reorganize after each attack.

##### 217. Organization of Delaying Positions

In general, the organization of a delaying position is similar to the organization of a defensive position. Most of the firepower of the troop should be oriented toward the enemy; however, adequate flank and rear security must be provided. Tanks are located



*Figure 45. Armored cavalry troop delaying positions between squadron delaying positions.*



to block likely avenues of enemy armor approach and to deliver long-range direct fire. Infantry elements are placed where they can protect tanks and have good fields of fire. If possible, the fires of machineguns should interlock.

## **218. Distribution of Forces For Delaying Action**

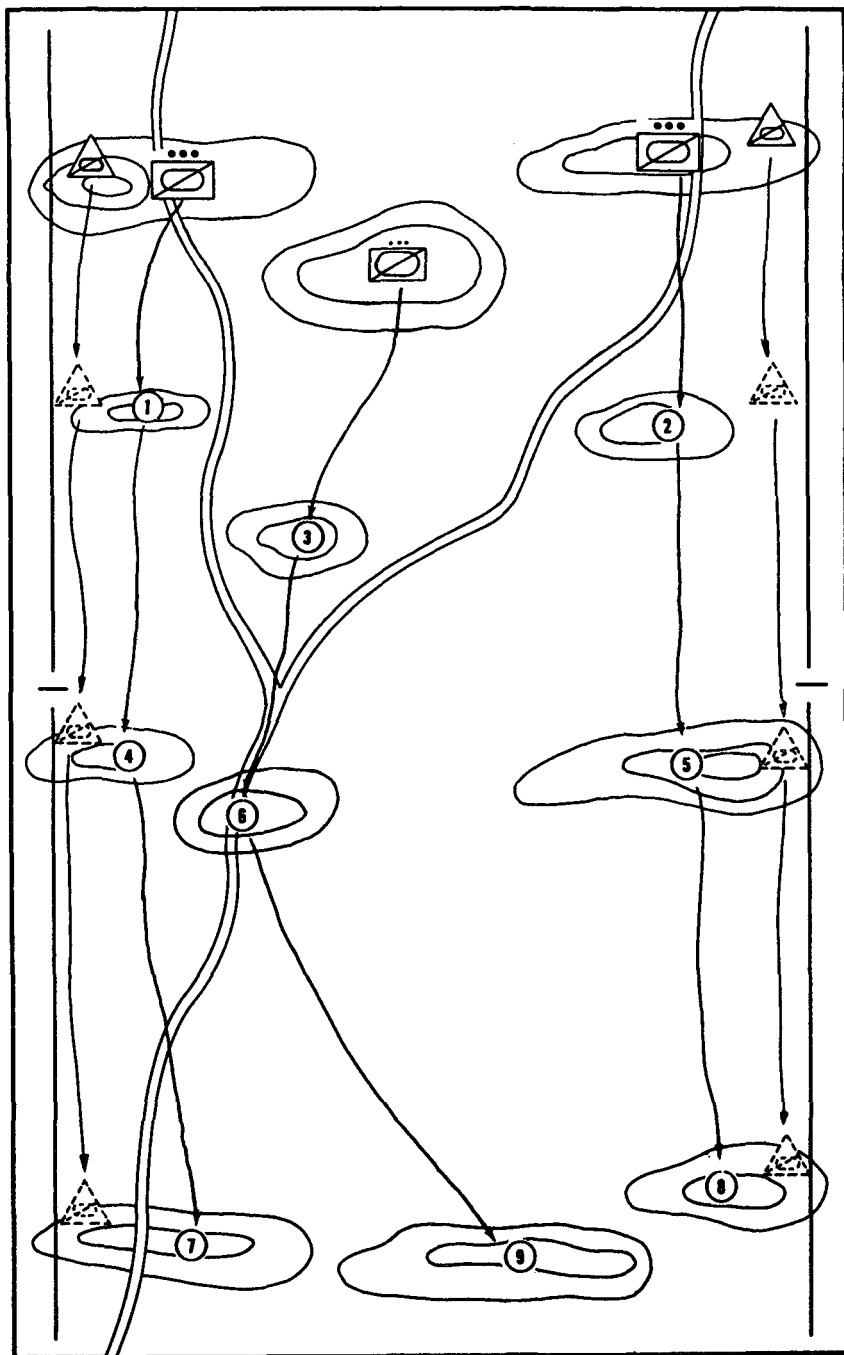
a. The troop commander deploys his platoons so that they cover likely avenues of enemy approach into his zone. When the troop is operating as an independent force, frontages will normally require the use of all platoons on line (fig. 46). The width of the assigned sector and the number of avenues of approach into the area determine the distribution of forces to be employed. When operating within a wide sector containing several avenues of approach, the troop commander will position one platoon to block each avenue of approach when possible. If the troop is delaying on a single axis, the troop commander may organize provisional platoons to concentrate his combat power; however, it is more normal to employ the platoons intact except for the support squads, which are employed under troop control whenever it is possible for them to support the entire troop from one firing position. The troop trains should remain within effective supporting distance of the platoons. The command post vehicle should be located to the rear, but must be able to maintain communication with both the platoons and the squadron command post.

b. The troop will normally not designate a reserve; however, when the width of the sector assigned to the troop permits positioning a platoon in depth, this platoon is used to counterattack, to block enemy penetrations, to reinforce elements on the delaying position, or to cover the withdrawal of forward elements.

c. The initial organization of forces to conduct the delay should not be considered inflexible. Frequently, during the conduct of the delay, the situation may require that certain changes be made. These changes in organization for combat or distribution of forces should take place whenever required by the tactical situation.

## **219. Fire Support Plan for Delaying Action**

The fire support plan should cover normal defensive fires, fires in support of a counterattack, and fires to cover the withdrawal. Defensive fires should concentrate on breaking up advancing enemy formations at long range. Details of the fire support plan must be disseminated to all personnel in the troop. See FM 17-1 for additional information.



*Figure 46. Armored cavalry troop conducting a delaying action with all platoons on line. Platoons withdraw by bounds. Scout elements provide security on the flanks.*

## 220. Actions on The Delaying Position

a. Long-range fires are brought to bear on the approaching enemy force as far forward of the delaying position as possible. This is usually accomplished by artillery and mortar fire. Tactical air engages enemy forces before they come within range of supporting artillery fires. Within the delaying force, tanks open fire on the enemy at maximum effective range. Other weapons within the position are brought to bear as soon as the enemy is within their effective range. Observation posts on the flanks of the position normally remain concealed and do not fire on the enemy unless forced to do so by enemy action. Maximum delay is obtained on each delaying position; however, the delaying force will normally be withdrawn from a position before becoming decisively engaged.

b. The troop commander must remain in close contact with his platoons so that they can perform maximum delay both on and between troop delaying positions. The troop will not withdraw until authorized to do so by the squadron commander. Unengaged platoons may be employed to assist or disengage heavily engaged platoons. When all platoons are on line and the troop is covering a very wide front, the troop commander must depend on individual platoon leader's action and initiative in disengaging and withdrawing to the next position. In this situation, security must be oriented toward preventing platoons from being cut off. The troop commander will normally remain on the delaying position until the last platoon withdraws. The executive officer, when present, will assist the troop commander in controlling the actions of the platoons.

c. Scout elements of the troop are initially employed well forward of the initial position to give early warning of enemy approach. They remain in contact with the enemy and within range of supporting artillery fire. As the enemy approaches the delaying position, scouts withdraw to the flanks. The scouts remain concealed and do not reveal their positions by firing, except as a local defensive measure. They maintain contact with the enemy, and report any attempt by the enemy to bypass or envelop the position. The short range ground radar is employed by the scouts to assist in gaining and maintaining contact with the enemy.

## 221. Establishing an Ambush

When conducting a delaying action, the troop commander should consider the possibility of ambushing the enemy (par. 137).

## 222. Withdrawal to The Next Delaying Position

a. Withdrawal from a delaying position must be accomplished while the troop retains freedom of action. The exact time of withdrawal depends on several factors—strength and composition of attacking force, status and location of adjacent units, strength of the position, condition of the delaying force, and the length of delay required by the mission.

b. The squadron commander will designate a route of withdrawal to the troop. Plans should include alternate routes of withdrawal. The routes of withdrawal in the troop sector must be protected and kept open.

c. The whole delaying force usually does not withdraw at the same time. Elements of the troop withdraw on order, according to plans or as forced by enemy action. The order in which elements of the troop withdraw is determined by the troop commander to ensure accomplishment of the mission and unit integrity. The delaying force employs fire and movement to withdraw, supported by fires of elements that may have been previously withdrawn, such as artillery, mortars, and tactical air. The troop commander withdraws with the last platoon to leave the delaying position.

d. Units withdraw only after approval by, or at the direction of, the next higher commander. The troop commander must keep himself and the squadron commander informed of the situation in the troop area to ensure a timely withdrawal before elements become decisively engaged.

e. Scout elements providing observation to the flanks do not withdraw in any set order. They keep the enemy under constant observation and move by bounds, using routes of withdrawal other than those used by other elements of the troop.

## 223. Occupation of Successive Delaying Positions

Successive troop delaying positions are organized and occupied in a manner similar to the initial delaying position. Prior to arrival of the troop, the next delaying position is reconnoitered and platoon positions are selected by the executive officer. As time, personnel, and equipment permit, the positions are prepared; ammunition and supplies stockpiled; obstacles created; and routes improved.

## 224. Reserve

a. The troop will normally employ all elements on line. When possible, one platoon is positioned to the rear of the other platoons.

This platoon is positioned to support the forward platoons by fire, both in the actual delay and during their withdrawal. It must be prepared to block by fire and maneuver any penetration of the troop position and to conduct limited-objective attacks to further delay the enemy or to assist in the withdrawal of engaged elements.

b. The troop may be designated as all or part of the reserve of a larger force conducting the delay. When so designated, the troop occupies a position specified by the higher commander and is employed as described in *a* above. For this mission, the troop may be organized into provisional tank and infantry platoons to form a tank-infantry team to counterattack when the troop is employed as a reserve and the support squads may be placed under control of the delaying force to augment its fire support.

## 225. Combat Support

a. In the conduct of a delaying action, the armored cavalry troop can expect assistance from artillery, engineers, tactical air, and Army aviation.

b. Artillery fire support is normally available to the armored cavalry troop in the conduct of a delaying action. The supporting artillery will initially provide long range fires on advancing enemy formations and continue to fire on the enemy as he advances toward the delaying forces. Artillery fires will also be used to support counterattacks by the reserve and to cover the withdrawal of the delaying forces from one position to the next. If artillery is in direct support, a forward observer will work with the troop, otherwise fires will be requested through command channels and will be adjusted by personnel in the troop capable of observing the target.

c. Engineer units will normally not be attached to the armored cavalry troop; however, they will operate in the general area and coordinate their efforts with the troop. Engineers will assist in the delay by destroying bridges, blocking roads, and erecting barriers. They will also maintain routes of withdrawal for friendly forces. The operations of engineers will normally be controlled at squadron or higher level. Coordination is necessary to ensure that obstacles constructed by the engineers are covered by fire and in no way impede the planned withdrawal of delaying forces or the commitment of the reserve.

d. Tactical air, when available, will assist in the conduct of the delaying action by disrupting and harassing enemy formations as they approach the delaying position. A forward air controller

may be available at squadron level to control the strikes of tactical aircraft.

e. Army aviation assists by providing aircraft for aerial reconnaissance, artillery and mortar observers, liaison, and for relaying information. If the situation warrants, transport helicopters may be used to transport elements of the troop or to carry critical items of resupply.

## Section II. WITHDRAWAL FROM ACTION

### 226. General

a. A withdrawal from action is an operation in which all or part of a deployed force disengages from the enemy in order to reach a position from which it can begin some other action. The armored cavalry troop may be required to conduct a withdrawal from action. Generally it is accomplished in two phases: a disengagement from action, followed by the formation of march columns for continued movement away from the enemy. A troop may be required to withdraw alone or as part of a larger force. If conducting an independent withdrawal from action, the troop must provide for its own security to cover the withdrawal of the bulk of the troop and to take necessary action to ensure a successful disengagement. One platoon may act as the security force for the remainder of the troop during a withdrawal from action. If conducting a withdrawal as part of a larger force, the troop may withdraw under cover of security elements provided by another unit, or it may adopt the techniques of a covering force or reserve for the larger unit.

b. The troop has the necessary mobility, firepower, and radio facilities to enable it to make a successful withdrawal either in daylight or at night. If friendly forces have local air superiority, a daylight withdrawal from action may be feasible. If withdrawal is to be made at night, the decision should be made sufficiently in advance to permit planning, coordination, and a daylight reconnaissance by the elements participating.

### 227. Orders for a Withdrawal From Action

The commander of a troop executing a withdrawal from action must designate in his order:

a. *The Location of the New Position or Assembly Area.* The new position or assembly area should be behind the line of contact and should be designated early enough to permit reconnaissance of the area.

*b. Provisions for Preparation and Occupation of the New Position.* These provisions should include necessary defensive measures, disposition of the troop trains and command post, and guides for units moving into the area.

*c. Routes of Withdrawal.* The troop will be assigned a route of withdrawal by the higher headquarters. The commander must exercise strict control over movement during the withdrawal. If the withdrawal includes a movement through a defensive position occupied by another unit, close coordination is required. Plans should include provision for guides from the unit being passed through, liaison, and recognition signals.

*d. Security Force.* The troop commander may designate one platoon as a security force in contact or a rear guard. If the troop is withdrawing as part of a larger unit, it may be assigned the mission of providing the security force.

*e. Time Schedule.* Higher headquarters designates the time of withdrawal for the troop. Based on this time, a schedule must be prepared to cover the entire operation. The time of withdrawal of the security force must allow the main body to move completely out of contact with the enemy.

*f. Priority of Withdrawal.* Troop trains and the command post vehicle should be designated as the first elements to withdraw. These elements are followed by those elements that will allow for an orderly withdrawal of the troop and still maintain unit integrity. The mortars, if operating under troop control, should be withdrawn early to provide fire support for other elements withdrawing. The security force will be the last element to withdraw.

## 228. Daylight Withdrawal From Action

*a.* In a daylight withdrawal, the troop commander normally employs about one third of his unit as a security force. This security force covers the withdrawal of the troop main body and withdraws on order of the troop commander in accordance with instructions received from the squadron or higher commander. For the troop to disengage from the enemy, the portion of the troop designated as the security force moves to a position to the rear. The balance of the troop executes a delaying action through the security force, breaks contact with the enemy force, forms into march column, and continues its rearward movement under cover of the security force (fig. 47). A limited-objective counter-attack by the security force may be necessary to disengage the troop.

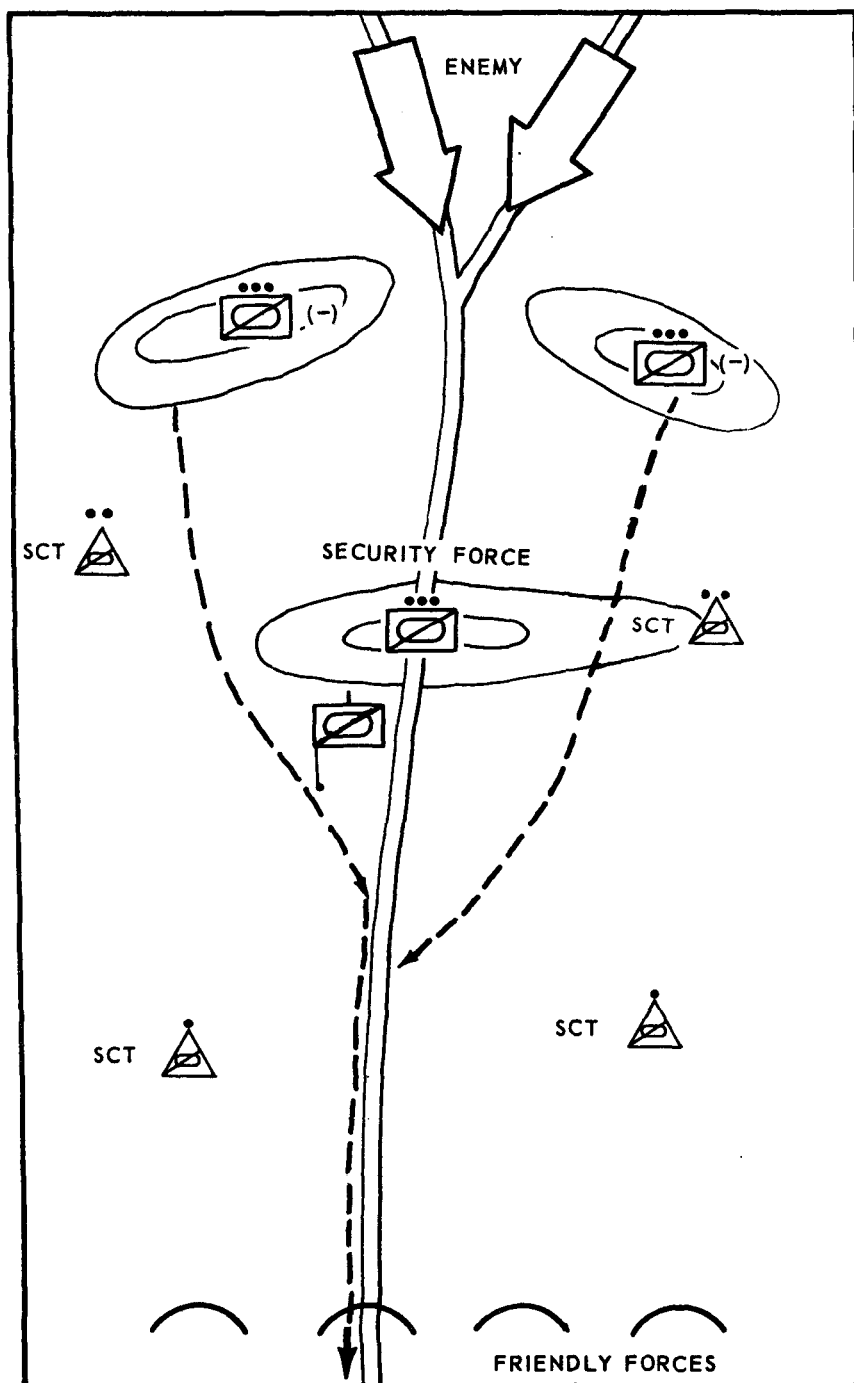


Figure 47. The armored cavalry troop initiating a withdrawal from action. The bulk of the troop withdraws through the security force, forms into march columns, and continues movement to the rear.



b. Once the main body has withdrawn, the security force employs fire and movement in a delaying action until it passes through friendly forces or disengages from the enemy.

c. In a daylight withdrawal from action, the troop may be designated as all or part of the reserve for a larger unit. When employed in this manner, the troop may:

- (1) Be employed as a counterattacking force to permit withdrawal of a unit that is heavily engaged. Such a counter-attack is a limited-objective attack.
- (2) Be employed as a security force to occupy a position from which it can cover by fire the withdrawal of units in contact with the enemy.
- (3) Be the first element to move to the rear when it is not required to assist other units in disengaging from the enemy.

d. When the troop is given a security force mission for a larger force, it organizes for combat and conducts its actions in essentially the same manner as the security force in the mobile defense. A troop that is in contact with the enemy and not required to provide its own security, disengages from action in a manner similar to that of a unit conducting a withdrawal in a delaying action (fig. 48).

## 229. Night Withdrawal From Action

a. A night withdrawal from action reduces the effectiveness of enemy air attacks and ground fire. It is easier to deceive the enemy at night; however, control is more difficult and movement slower. In rugged terrain, the speed of withdrawal may be quite slow if a number of tracked vehicles must be guided from their positions to the main route of withdrawal.

b. Elements of the troop are left in contact with the enemy when the situation requires that security be provided for the other elements of the troop that are withdrawing. Within the troop the elements left in contact may consist of an armored cavalry platoon or elements of each of the three platoons. In the event a provisional element is left in contact, the troop commander may designate the executive officer or a platoon leader to command this force. Coordination must be achieved within the force remaining, between this force and the withdrawing element of the troop, and with adjacent units. Matters of command and control must be clearly specified.

c. Elements left in contact use whatever deceptive measures are available to create the impression that a much larger force

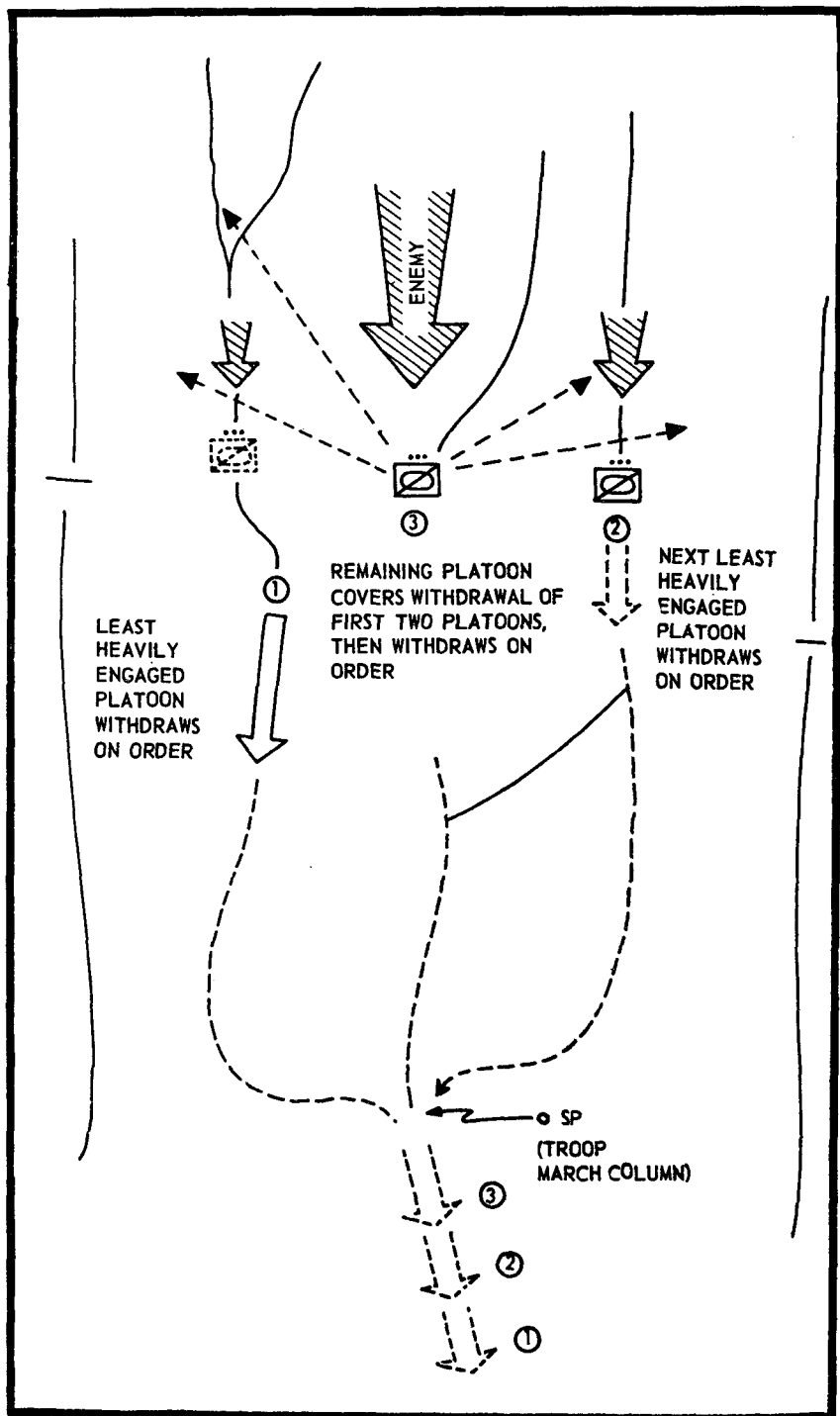


Figure 48. Armored cavalry troop withdrawal from contact.

is remaining in position. Such deceptive measures include those things normally associated with operations in a fully manned position, such as digging in, moving of equipment, and firing of weapons.

d. Units withdraw at night in generally the same manner as in daylight. All platoons, minus their security elements, move simultaneously, if possible. Formations are closer and movements are made with greater emphasis on secrecy and security than during daylight withdrawals.

e. Conditions may permit a unit to withdraw so rapidly that the enemy cannot interfere with the movement. If a commander is certain that this is possible, he may execute a night withdrawal without the use of a security force. However, each platoon is responsible for maintaining its own security during this type of move.

### **Section III. RETIREMENT**

#### **230. General**

A retirement is an operation in which a force avoids engagement under existing conditions by moving away from the enemy without direct pressure. It may be made following a withdrawal from action or when no actual contact with the enemy has been made. The armored cavalry troop usually executes a retirement as part of a larger force.

#### **231. Employment of Armored Cavalry Troop in Retirement**

The armored cavalry troop, as part of the squadron or another larger force, is best suited to be employed as a security force during a retirement. Appropriate security force missions include acting as part of a covering force or as a flank or rear guard for the main body executing the retirement. Occasionally, it is necessary for the armored cavalry troop to conduct a delaying action prior to executing a rear guard mission.

## **PART FIVE**

### **ARMORED CAVALRY SQUADRON**

#### **CHAPTER 16**

##### **GENERAL**

---

##### **Section I. GENERAL**

##### **232. Purpose and Scope**

Part five is a guide for the employment of the armored division cavalry squadron and the infantry division cavalry squadron. This portion of the manual covers organization, organization for combat, general employment, and offensive, defensive retrograde, reconnaissance, and security operations for the divisional cavalry squadrons. The armored cavalry squadron of the armored cavalry regiment is discussed in FM 17-95.

##### **233. Types of Armored Cavalry Squadrons**

The armored division cavalry squadron consists of a headquarters and headquarters troop and four armored cavalry troops; the infantry division cavalry squadron consists of a headquarters and headquarters troop and three armored cavalry troops. The organizational structure of the armored cavalry troop in both squadrons is the same. There are some minor organizational differences in the headquarters and headquarters troop of each of the two squadrons.

##### **234. Missions and Capabilities**

a. The armored cavalry squadron performs three types of missions: reconnaissance, security, and economy of force. The squadron is organized, equipped, and trained to engage in offensive and defensive combat or in retrograde operations in the execution of these missions. The types of missions performed by the squadron are the same regardless of whether the squadron is organic to the armored division or to the infantry division.

b. The armored cavalry squadron is capable of performing the following missions:

- (1) Conducting reconnaissance over wide fronts and to extended depths.
- (2) Collecting and reporting information of intelligence value, including information of potential nuclear targets and nuclear damage assessment.
- (3) Protecting the flanks of the division.
- (4) Providing security between elements of the division or between the division and an adjacent unit.
- (5) When reinforced, acting as a division covering force in offensive, defensive and retrograde operations.
- (6) Screening the concentration of elements of the division.
- (7) Securing rear areas, routes of communication, and installations from enemy airborne, air landed, or guerrilla forces.
- (8) Conducting offensive, defensive, and retrograde operations.
- (9) Maintaining liaison and contact between major units.
- (10) Providing emergency means of communication for higher headquarters through the use of radios, messengers, and other facilities.
- (11) Conducting CBR monitoring and survey operations.
- (12) Performing damage control operations.

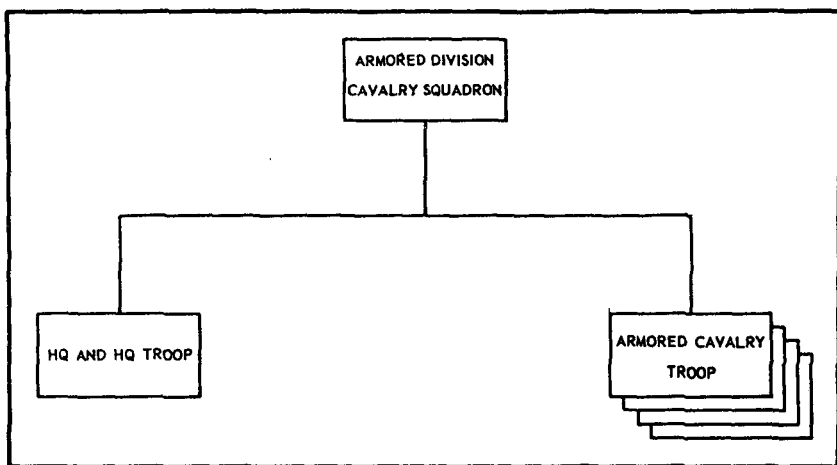
## **235. Administration**

The tactical success of the armored cavalry squadron requires adequate and continuous administrative support. In this support prior logistical planning is essential. Supply, medical evacuation, transportation, and maintenance must be adequate and timely. The procedures for all aspects of logistical support, the logistical elements available to the commander, and the employment of the squadron trains are covered in detail in FM 17-50.

## **Section II. ARMORED DIVISION CAVALRY SQUADRON ORGANIZATION**

### **236. General**

The armored division cavalry squadron consists of a headquarters and headquarters troop and four armored cavalry troops (fig. 49). The organization of the armored cavalry troop is covered in chapter 10.



*Figure 49. Organization of the armored division cavalry squadron.*

### 237. Headquarters and Headquarters Troop

*a.* The headquarters and headquarters troop of the armored division cavalry squadron consists of the squadron headquarters and the squadron headquarters troop. The squadron headquarters contains the squadron commander and his staff. The headquarters troop contains a troop headquarters, squadron headquarters section, headquarters tank section, squadron communication platoon, squadron support platoon, squadron maintenance platoon, squadron personnel section, and squadron medical section (fig. 50).

*b.* The mission of the headquarters and headquarters troop is to provide command, administration, communication, supply, medical, transportation, and maintenance support for the squadron.

### 238. Squadron Headquarters

The squadron headquarters contains the personnel necessary to command, control, and coordinate the activities of the squadron. These are the squadron commander, executive officer, adjutant (S1), intelligence officer (S2), operations officer (S3), logistics officer (S4), communication officer, S3 air, maintenance officer, surgeon, and sergeant major. For duties and responsibilities of the squadron commander and his staff, see FM 17-1.

### 239. Headquarters Troop Headquarters

*a. General.* The troop headquarters of the headquarters troop is organized to provide administrative, supply, maintenance, and mess facilities for the troop and for squadron headquarters personnel. It consists of a headquarters section; an administrative, mess, and supply section; and a maintenance section.

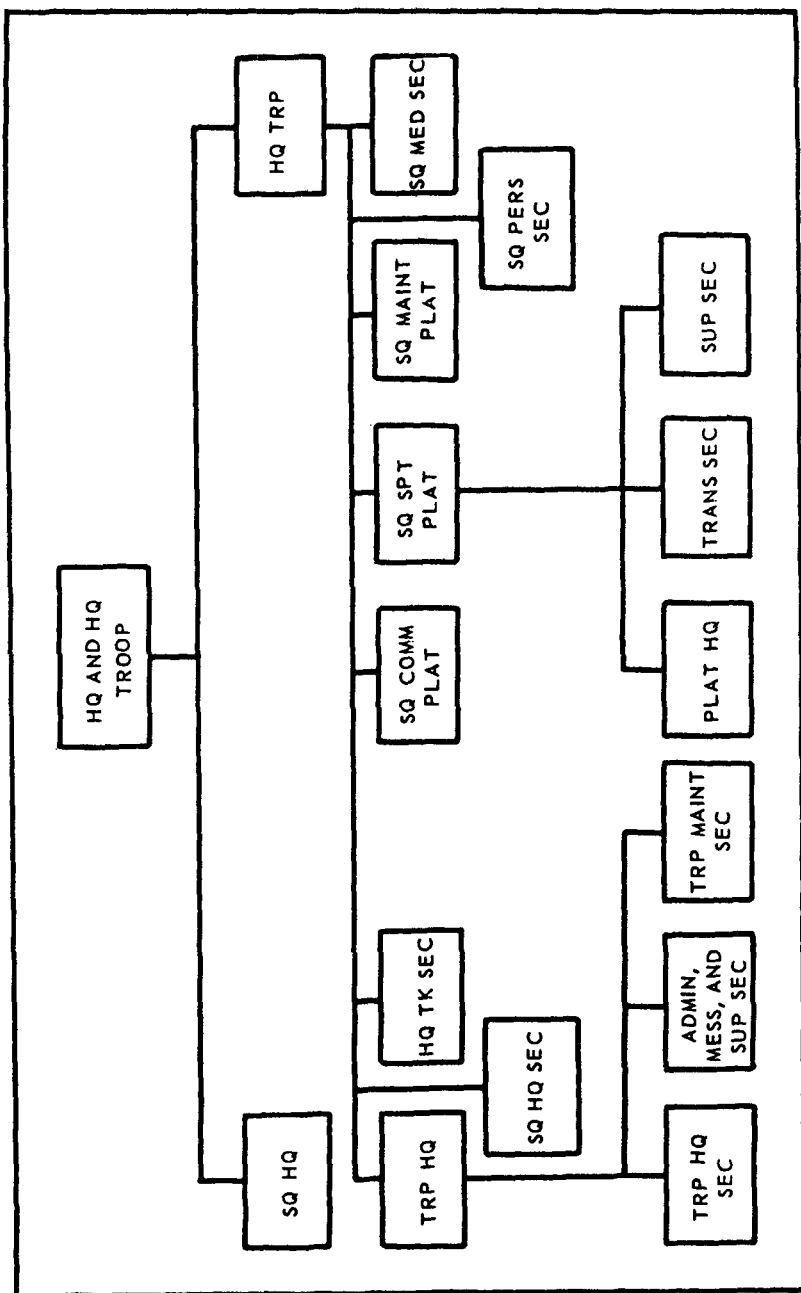


Figure 50. Organization, headquarters and headquarters troop, armored division cavalry squadron and infantry division cavalry squadron.

*b. Troop Headquarters Section.* This section includes the troop commander, the first sergeant, and a driver. The troop commander may be designated as the squadron headquarters commandant. As such, he is responsible for the organization, security, and movement of the squadron command post under the direct staff supervision of the S1. The troop commander is responsible also for providing mess facilities for attached and supporting personnel, such as liaison officers and forward air controllers.

*c. Administrative, Mess, and Supply Section.* This section prepares administrative data for submission to higher headquarters and feeds, clothes, and equips personnel of the troop and of squadron headquarters. It is composed of the supply sergeant, mess steward, cooks, troop clerk, and drivers, and is equipped with three cargo trucks and trailers.

*d. Maintenance Section.* This section is commanded by a warrant officer who is the troop maintenance officer. The section includes the maintenance sergeant, mechanics, and the troop armorer. It has the function of keeping all headquarters troop vehicles and armament operating at maximum efficiency.

## **240. Squadron Headquarters Section**

The squadron headquarters section provides the bulk of the enlisted personnel for the staff sections and part of the vehicles needed for command and control of the squadron. Personnel include three liaison officers, an intelligence sergeant, operations sergeant and assistants, a mail clerk, clerk typists, and drivers for the section vehicles. Transportation includes four armored personnel carriers and necessary general purpose vehicles.

## **241. Headquarters Tank Section**

The headquarters tank section consists of the crews for the four light-gun tanks used by the squadron commander, operations officer, artillery liaison officer, forward air controller (when one is present), and other staff members as desired. Personnel in the section include four each tank commanders, gunners, tank drivers, and loaders.

## **242. Squadron Communication Platoon**

*a.* The squadron communication platoon, commanded by the squadron communication officer, contains a communication chief and sufficient specialists, equipment, and organic transport to install, operate, and maintain the squadron communication system. Following the instructions of the squadron communication officer,



the communication chief supervises the assignment and activities of the platoon's radioteletype and CW radio operators and the message center, wire, and maintenance personnel. The platoon is transported in an armored personnel carrier and light cargo trucks. The radioteletype and CW radio operators normally ride with the staff sections to which they are assigned.

b. The platoon contains also a senior radar operator and two assistants to operate the organic medium-range ground radar set. This set is used to perform combat surveillance and is capable of detecting and locating moving ground targets. A  $\frac{3}{4}$ -ton truck provides transportation for the radar operators and their equipment.

### 243. Squadron Support Platoon

a. *General.* The support platoon is organized into a platoon headquarters, a transportation section, and a supply section. It has the personnel, vehicles, and equipment to furnish the transportation and logistical support required by the squadron.

b. *Platoon Headquarters.* Platoon headquarters consists of a platoon leader and driver. The platoon leader controls the squadron trains. He has radio communication with the transportation section leader and the squadron S4, using the squadron logistical net or, in emergencies, the squadron command net.

c. *Transportation Section.* The transportation section is organized and equipped with the personnel and trucks necessary to transport that part of the squadron basic load of class V and of the prescribed load of class III supplies that are carried in the squadron trains, and all types of supplies from division supply or distributing points to troops of the squadron. During operations, the transportation section leader, a lieutenant, maintains radio communication with the support platoon leader and the squadron S4 on the squadron logistical net.

d. *Supply Section.* The supply section operates under the supervision of a warrant officer. The section is responsible for receiving and consolidating supply requests from the troops, preparing all requisitions, and obtaining and issuing supplies within the squadron. It also maintains the property and supply records for the squadron.

### 244. Squadron Maintenance Platoon

The squadron maintenance platoon is organized and equipped to perform second-echelon (organizational) maintenance, to recover and evacuate disabled vehicles, and to supply parts for weapons and vehicles of the squadron. The platoon is commanded by the

squadron maintenance officer, who, during operations, is in radio communication with the Squadron S4 and the troop maintenance sections, using the squadron logistical net.

#### **245. Squadron Personnel Section**

The squadron personnel section prepares and maintains personnel records, rosters, correspondence, and reports for the squadron. The section consists of the personnel officer, personnel sergeant, and personnel specialists. When the squadron is not engaged in combat operations, this section works under the supervision of the squadron adjutant (S1). When the squadron is in combat, this section normally operates in the division administration center, located at the division headquarters rear echelon.

#### **246. Squadron Medical Section**

a. The medical section provides medical service and support for the squadron. Personnel consist of a medical officer, section sergeant, aidmen, ambulance drivers, aid station attendants, and a clerk. It furnishes emergency medical treatment, establishes and operates a squadron aid station, evacuates casualties to the squadron aid station for sorting and emergency care, and assists in preventive medicine measures. This section provides technical instruction for squadron personnel in first aid, field sanitation, and related subjects and conducts medical and sanitary inspections. The squadron medical section may be augmented, when necessary, by personnel, vehicles, and equipment from the division medical battalion.

b. The normal allocation of medical section support to each armored cavalry troop in the armored division cavalry squadron consists of one medical aid-evacuation team composed of one  $\frac{3}{4}$ -ton ambulance with driver and one aidman per platoon.

### **Section III. INFANTRY DIVISION CAVALRY SQUADRON ORGANIZATION**

#### **247. General**

The infantry division cavalry squadron consists of a headquarters and headquarters troop and three armored cavalry troops (fig. 51). The organization of the armored cavalry troop is covered in chapter 10.

#### **248. Headquarters and Headquarters Troop**

The organization and functions of the headquarters and head-

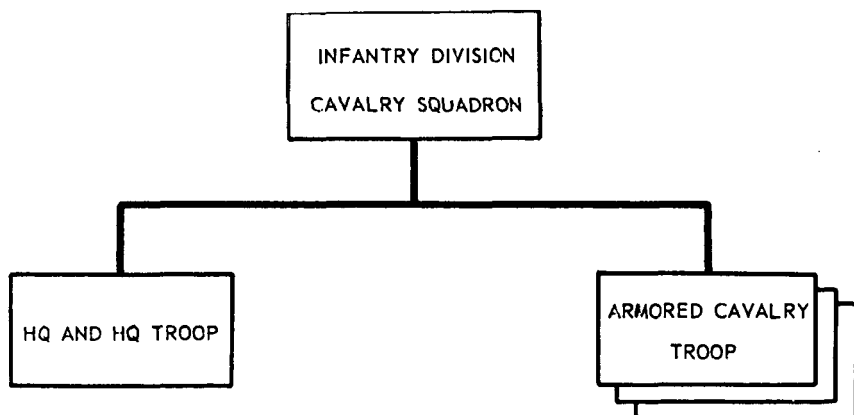
quarters troop of the infantry division cavalry squadron are similar to those of the headquarters and headquarters troop of the armored division cavalry squadron (pars. 236-246). However, since the infantry division cavalry squadron has only three armored cavalry troops, the majority of the components of its headquarters and headquarters troop have fewer personnel and less equipment. The major differences are:

a. Administrative, mess, and supply section has two 2½-ton trucks and trailers instead of three.

b. Headquarters tank section has two light-gun tanks instead of four.

c. Squadron headquarters section has two liaison officers instead of three.

d. Medical section has ¼-ton ambulances instead of ¾-ton ambulances in support of the armored cavalry troops.



*Figure 51. Organization of the infantry division cavalry squadron.*

## CHAPTER 17

### EMPLOYMENT OF THE ARMORED CAVALRY SQUADRON

---

#### Section I. GENERAL

#### 249. General

a. The armored cavalry squadron may be employed on reconnaissance, security, or economy of force missions for the unit to which assigned or attached. The situation confronting the higher commander will determine the best employment of the squadron.

b. The tactics, techniques, and procedures of employment of both the armored division cavalry squadron and the infantry division cavalry squadron are generally the same. Differences in employment exist only in the scope of operations and in the size of the area of operations of the two squadrons. These differences are necessitated by differences in the organization of the squadrons and in the organization and employment of the armored and infantry divisions.

c. The squadron is one of the most effective nuclear weapons target acquisition agencies available to the division commander. It will frequently be through its efforts that possible nuclear targets are first identified and, in conjunction with other information collection agencies, sufficiently developed to define clearly a target for a nuclear attack. The aerial surveillance platoon, organic to the division aviation company, when employed under operational control of the squadron commander, increases the capability of the squadron to identify, locate, and develop targets for nuclear weapons attack.

d. The squadron may be employed to exploit the effects of a nuclear explosion.

e. Elements of the squadron may frequently be employed to conduct damage assessment reconnaissance of the area of operations affected by a nuclear explosion or CBR attack, either friendly or enemy, to determine the extent of damage and the degree of contamination prior to the entry of other forces. When this is done following an enemy nuclear detonation or CBR attack, the armored cavalry squadron may have the mission of assisting in the reorganization and re-establishment of command, control, and com-

munication within the affected area, and may temporarily assume the mission of an affected unit in the area.

## **250. Employment of the Armored Cavalry Squadron**

a. The divisional cavalry squadron may operate under direct control of the division or under control of one of the major subordinate commands of the division, or elements of the squadron may be attached to other elements of the division. The squadron is most effectively employed as a unit, without detachments, under division or combat command control in the armored division and under division, brigade, or battle group control in the infantry division.

b. The squadron is retained directly under division control when the squadron mission is of primary interest to the division as a whole. It submits reports to other agencies having a requirement for the information as well as to the division command post.

c. The squadron may be attached to a major subordinate command when the mission to be performed is of primary interest to that unit. If the division is in a column formation, the armored cavalry squadron may be attached to the leading major subordinate command. In this situation, the squadron is best suited for the mission of providing security for one or both flanks of the leading subordinate command, and of reconnoitering the axis of advance. When his squadron is employed in this manner, the squadron commander will normally control and coordinate all elements of the squadron.

d. When required, one or more of the armored cavalry troops of the squadron may be attached to a major subordinate command of the division. This attachment is normal when adequate armored cavalry support cannot be provided with all troops retained under squadron control. As an example, when the division is operating on a wide front, the squadron, minus one troop, may operate on the most exposed or seriously threatened flank, and one troop, attached to a subordinate command, may operate on the opposite flank. Under these circumstances, the troop will normally have attached, from the squadron, a proportionate share of the squadron logistical support.

## **Section II. ORGANIZATION FOR COMBAT**

### **251. General**

The armored cavalry squadron commander is responsible for the organization for combat of his squadron. In order to determine the best organization for combat for accomplishing an as-

signed mission, the squadron commander considers the mission, enemy situation, terrain and weather, and troops available (METT). The essential elements for combined arms operations are present within the squadron.

## **252. Organization for Combat**

a. The squadron commander normally employs the armored cavalry troops directly under his control without change in the troop organization. In the accomplishment of normal reconnaissance and security missions, the troops do not require attachments, although available Army aircraft and surveillance devices will normally be used to augment the capabilities of the troops.

b. Certain situations may arise in which it is desirable to make a temporary reorganization of one or more armored cavalry troops to accomplish a specific mission. In this instance, the squadron commander shifts the elements of the armored cavalry troops to form teams of appropriate size and with the proper ratio of tanks, riflemen, scouts, and mortars to best accomplish the mission.

## **Section III. COMBAT SUPPORT**

### **253. General**

The armored cavalry squadron normally operates without attachments; however, combat support may be provided by artillery, engineers, Army aircraft, and tactical air. Also, tanks and infantry may be attached to the squadron for a particular mission.

### **254. Artillery Support**

As a rule, the armored cavalry squadron operates without direct support artillery. When required, artillery fire support is usually provided by the artillery units supporting the division or the major subordinate unit to which the squadron may be attached. When the squadron is operating beyond the range of the artillery units supporting the command, artillery may be attached to the squadron. When direct support artillery is available, the squadron commander and artillery representative must closely coordinate the supporting artillery fires with the squadron plan of operations.

### **255. Tank and Infantry Support**

a. When an infantry unit is attached to the squadron, it may be kept intact as a tactical unit, or elements may be further attached to the armored cavalry troops. The attached unit is employed in an infantry role in support of the squadron mission.

b. When a tank unit is attached to the squadron, it is preferable to employ it as a unit under control of the squadron commander; however, when required, tanks may be attached to armored cavalry troops.

c. If both tanks and infantry are attached at the same time, consideration should be given to employing them as a tank-infantry team.

## **256. Engineer Support**

Engineers may be attached to the squadron to perform demolition functions, to assist in the crossing or clearing of obstacles, and to perform road maintenance, in order to facilitate movement of the squadron. Attached engineers are held under squadron control or placed in support of one or more of the troops, as required by the situation. Engineer reconnaissance teams may be attached to the squadron for the purpose of gathering technical information of roads, bridges, and obstacles. These teams may be further attached to the armored cavalry troops.

## **257. Army Aviation Support**

a. Army aviation support is provided by the division aviation company (FM 1-5 and FM 1-100). Aviation staff assistance and advice are offered to the squadron commander by the combat support section leader or a designated aviator. Reconnaissance helicopters and light observation aircraft are used by the squadron commander, the staff, and troop commanders for observation, reconnaissance, and control. Transport helicopters are available to the squadron commander from the division aviation company on a specific-mission basis. These helicopters are used to transport scouts (including 1/4-ton trucks) and riflemen on combat or reconnaissance missions and for air movement of supplies.

b. The aerial surveillance platoon of the division aviation company, consisting of a platoon headquarters, visual and photo section, aerial radar section, drone section, and two tracking and plotting radar teams, may be employed in a general support role for the division, or it may be placed in support of a specific unit. It is normally employed under operational control of the armored cavalry squadron during combat operations. This platoon assists the squadron commander in the accomplishment of his assigned mission by performing:

- (1) Day and night photography.
- (2) Visual reconnaissance.
- (3) Aerial electronic surveillance.

## **258. Tactical Air Support**

When tactical air support is available, the Air Force provides a forward air controller. The forward air controller advises the squadron commander in matters pertaining to the employment of tactical air and controls air strikes flown in support of the squadron. Close liaison should be maintained between the forward air controller and the artillery liaison officer. The forward air controller should remain with the squadron command post or command group until a target is selected; he then moves to a point where he can observe and direct the air strike. He operates from a tank provided by squadron headquarters, in the vehicle provided to him by division artillery, or in Army aircraft. Necessary communication equipment is available in the squadron for the forward air controller to control air strikes.

### **Section IV. EMPLOYMENT, HEADQUARTERS AND HEADQUARTERS TROOP**

#### **259. General**

The headquarters and headquarters troops of both armored cavalry squadrons have the same general organization. Differences exist in the number of personnel and amount of equipment within the various platoons and sections of the headquarters troop, but they do not affect employment. See paragraph 248.

#### **260. Technique of Operations, Squadron Headquarters**

The organization of the squadron headquarters and headquarters troop permits flexibility in its organization for combat. It must be organized to provide control and coordination of, and logistical support to, the armored cavalry troops. During combat operations, the squadron headquarters usually operates in two echelons—the command post and squadron trains. The composition of the command post and trains may vary with the situation.

#### **261. Squadron Command Post**

a. The squadron command post contains the personnel and facilities for the control of combat and administrative operations of the squadron. The command post maintains communication with higher, adjacent, supporting, and subordinate units. It receives and forwards reports on new developments in the situation, makes plans for current and future operations, provides for liaison with higher and adjacent units, and controls liaison personnel from



supporting and lower units. The command post usually includes the squadron commander, the staff, and such liaison personnel as are necessary. During offensive operations the command post moves with the combat elements of the squadron and thereby gains a large degree of security. In defensive or retrograde operations, the command post is usually located far enough to the rear so as not to interfere with combat operations.

b. The squadron commander operates from the location that permits him to best control combat operations. He takes with him certain key members of the staff, key attached personnel, and the necessary equipment and facilities to form a command group.

## 262. Command Post Organization

a. The headquarters troop commander is responsible for the organization, security, and movement of the command post under the direct staff supervision of the squadron S1.

b. The plan for the internal arrangement of the squadron command post must provide for communication requirements, efficient functioning, security, and access to the available road net (fig. 52). In the organization of a command post, the following should be practiced so far as terrain and tactical conditions permit:

- (1) The command post should be located to ensure maximum communication facilities of all types.
- (2) Sections should be located within the perimeter of whatever security is provided.
- (3) The message center should be located near the entrance.
- (4) The operations and intelligence sections should be centrally located.
- (5) The commander and executive officer should be located near each other and close to the operations and intelligence sections.
- (6) Liaison personnel should be so located as to be readily accessible.
- (7) The command post should provide a suitable helicopter landing site.

c. During combat operations, the squadron command post normally remains mobile and operates entirely from vehicles. In order to control the armored cavalry troops, the command post is located so that it is in communication both with the troops and with higher headquarters. The extensive capability of the squadron communication system enables the command post to operate efficiently on the move.

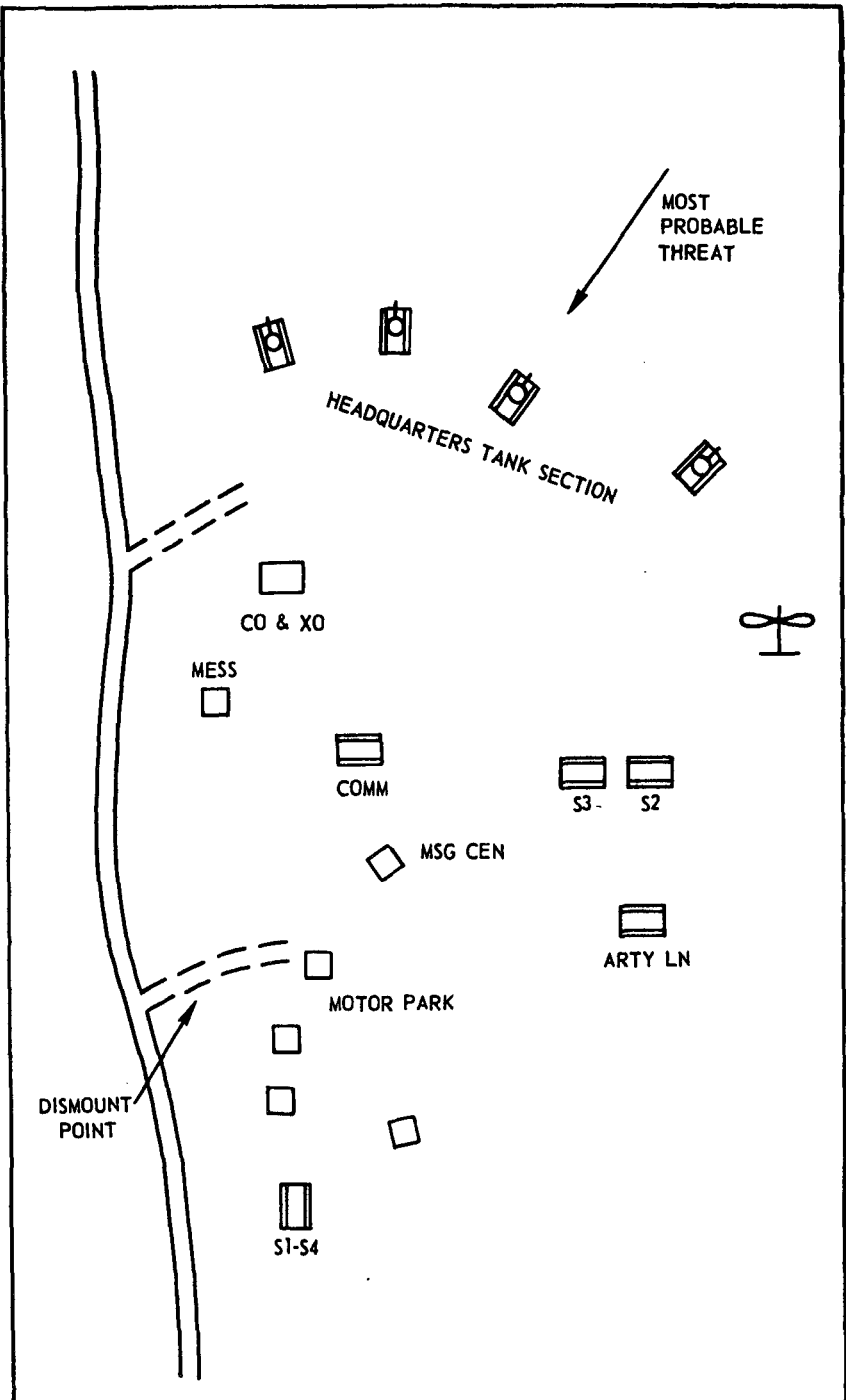


Figure 52. A method of arranging the elements of the squadron command post.

## 263. Squadron Trains

Squadron trains consist primarily of those elements of the squadron providing logistical support. The organization, location, and employment of the squadron trains depend upon the administrative situation, the mission, time and space factors, and the tactical situation. For a detailed discussion on methods of operations, see FM 17-50.

## 264. Command, Control, and Coordination

a. The squadron commander controls and coordinates the operations of the armored cavalry troops through the command post and command group.

b. In the operation of the armored cavalry squadron headquarters, it is essential that communication be maintained and that information be constantly exchanged between the command post and the command group when it is operating away from the command post. The command post must keep itself and higher headquarters informed of the squadron situation. To do this, command post personnel must be familiar with the decisions, locations, and actions of the squadron commander. On the other hand, the commander cannot satisfactorily command the squadron unless he is aware of the squadron situation as a whole and of current information from higher and adjacent headquarters. To ensure a high degree of coordination, the executive officer, working from the command post, relays orders and makes decisions of other than a tactical nature in the commander's name. The commander, with the command group, must locate himself where he can be in constant communication with the command post and where he can best supervise the activities of the entire squadron. In order to ensure prompt logistical support, close coordination and communication must be maintained between the command post and the squadron trains. This coordination is usually accomplished by the timely exchange of information between the S4, located at the command post, and the support platoon leader, who controls the squadron trains.

c. Command and control of the squadron are facilitated by the efficient use of liaison officers. Liaison officers are employed in order to obtain cooperation, exchange information, and ensure unity of effort among the commanders. The armored cavalry squadron maintains liaison with higher and adjacent headquarters. Liaison officers spend most of their time at the headquarters to which they are sent, maintaining communication with their parent unit. Squadron liaison officers are equipped to operate in

the command net of the unit with which they are performing liaison and operating at the higher headquarters is equipped with an AM radio for operation in the squadron command net AM. Thus, the liaison officer at higher headquarters is able to receive information directly from the armored cavalry troops or from the squadron operations section and pass it immediately to the next higher headquarters. He is also able to transmit information and instructions expeditiously from the higher headquarters to the squadron.

#### **265. Employment of Medium Range Ground Radar**

The medium range ground radar equipment organic to the squadron will usually operate directly under squadron control, although it may be attached to an armored cavalry troop when this attachment will contribute to the accomplishment of the mission. This radar equipment is used to perform combat surveillance and is capable of detecting and locating moving ground targets. See paragraphs 30 through 32 and FM 17-1 for additional information on employment.

## CHAPTER 18

### RECONNAISSANCE OPERATIONS, ARMORED CAVALRY SQUADRON

---

#### Section I. GENERAL

##### 266. General

a. The armored division cavalry squadron and the infantry division cavalry squadron are the principal reconnaissance agencies for their parent divisions. In executing reconnaissance missions, the squadron obtains information by surveillance, stealth, and infiltration whenever possible; however, the squadron engages in active combat when necessary to obtain information of the enemy and terrain.

b. The armored cavalry squadron accomplishes its reconnaissance missions by employing its armored cavalry troops alone or reinforced, as may be required. Army aircraft, through aerial observation, photography, and electronic surveillance, extend the range and scope of reconnaissance operations conducted by the squadron. Information obtained by Army aircraft is subject to confirmation by ground troops (fig. 53).

c. The armored cavalry squadron is normally employed in close reconnaissance. Close reconnaissance is the directed effort to gather information in the area of current tactical operations, to the depth of the division area of influence. When executing close reconnaissance, the squadron normally is directed to determine the location, composition, and disposition of enemy troops in contact, including the local reserves immediately in rear of the line of contact, and specific information of the area of operations. When suitably reinforced by fire support agencies and Army aircraft, the squadron may conduct extended reconnaissance missions. These operations extend from the limit of close reconnaissance to the depth of the division area of interest within the division's zone. Extended reconnaissance is directed toward determining the location, composition, and disposition of enemy reserve forces and supporting troops that can influence the outcome of current operations.

AERIAL RECONNAISSANCE AND  
SURVEILLANCE EXTEND THE RANGE  
AND SWEEP OF THE OPERATIONS.

RECONNAISSANCE HELICOPTERS  
EXTEND THE RANGE OF OBSERVATION  
AND PERMIT COMMAND CONTROL  
FROM THE AIR.

CARGO HELICOPTERS TRANSPORT  
VEHICLES, EQUIPMENT, SUPPLIES,  
AND PERSONNEL AND MAKE POSSIBLE  
THE IMMEDIATE CROSSING OF  
OBSTACLES.

GROUND ELEMENTS PROVIDE  
DETAILED GROUND RECONNAISSANCE  
TO VERIFY, IDENTIFY, AND LOCATE  
MORE EXACTLY ENEMY FORCES AND  
INFORMATION OF THE AREA OF  
OPERATIONS.

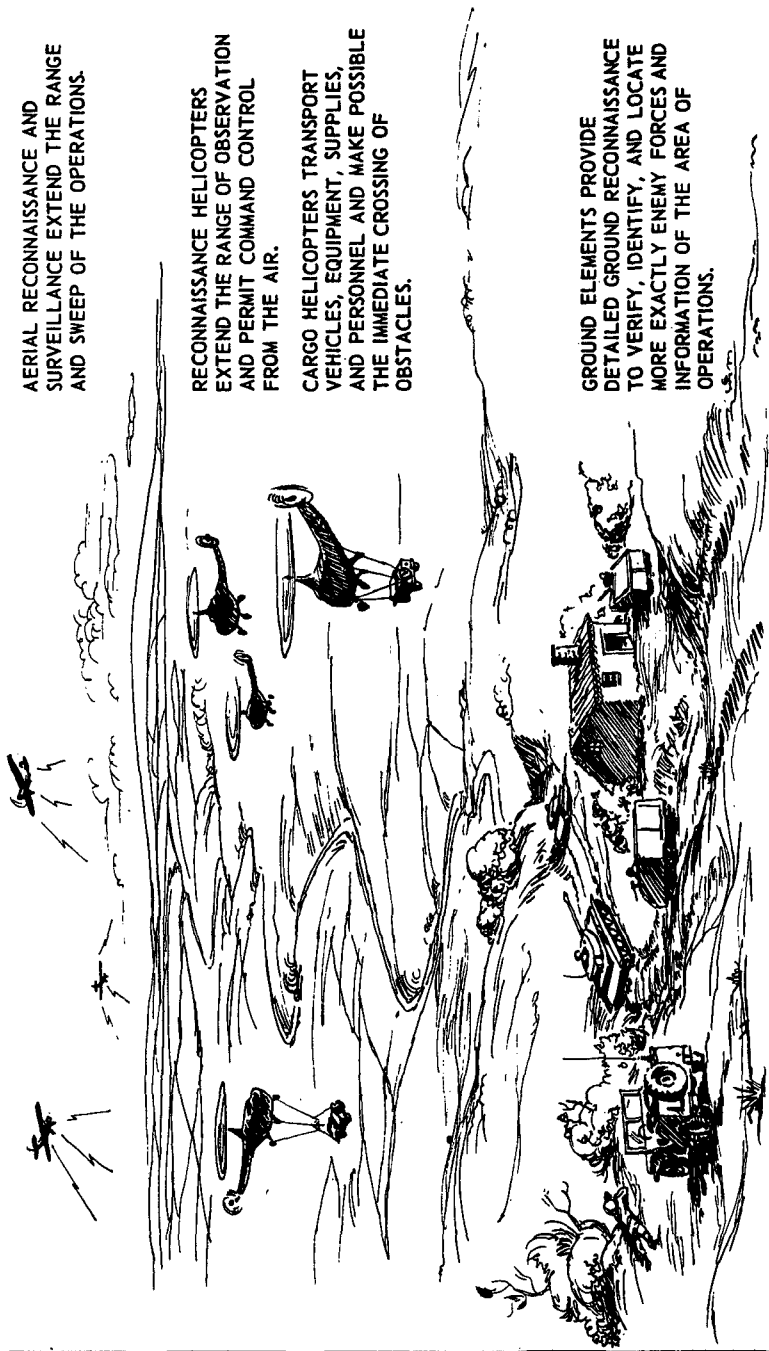


Figure 53. Ground and air reconnaissance activities are interrelated.

## 267. Reconnaissance Frontages

a. There is no set distance for the width of front to be covered by the armored cavalry squadron in performing a reconnaissance mission. The factors that affect the frontage assigned to the squadron include the type of information and detail desired, the time available, the enemy capability to resist or interfere, the terrain (with emphasis on the road net), and the weather.

b. The armored division cavalry squadron can effectively reconnoiter four major routes of approach by assigning one major route to each armored cavalry troop. The infantry division cavalry squadron can effectively reconnoiter three major routes of approach by assigning one major route to each armored cavalry troop. Usually this allocation permits the assignment of two or three secondary routes to each troop.

c. Observation aircraft and reconnaissance helicopters increase the speed and extend the range, width, and scope of the reconnaissance performed by the squadron. The number of aircraft attached to or placed in support of the squadron from the division aviation company will depend on the situation. The aerial surveillance platoon is normally placed under operational control of the squadron. The fixed wing aircraft of this platoon, employed in conjunction with the troops of the squadron, perform visual, photographic, and electronic surveillance. Fixed wing aircraft and helicopters supporting the squadron usually operate in front of and to the flanks of the squadron. Transport helicopters supporting the squadron are used to move scouts and riflemen to investigate or seize key terrain features and to establish observation posts ahead of or to the flanks of the troops. This method of operation increases the reconnaissance frontage but its principal effect is to quicken the tempo and improve the effectiveness of reconnaissance operations. Armored cavalry personnel must be well trained in terminal guidance procedures to assist in operations of this type.

d. The organic ground radar equipment may be used to extend and augment the reconnaissance effort of the squadron, particularly during periods of limited visibility. Ground radar operators must work in conjunction with other elements of the squadron.

## 268. Reconnaissance Missions

The squadron commander determines routes, zones, or areas to be reconnoitered by the armored cavalry troops and supporting Army aviation elements. Responsibility must be fixed and duplication of effort avoided. Maximum freedom of action is allowed sub-

ordinate commanders in execution of reconnaissance missions. *Orders for reconnaissance operations should be specific so that each troop commander has an objective toward which he can direct the efforts of his troop.* Instructions should also specify what the unit is to do after completing the reconnaissance mission.

## Section II. ROUTE, ZONE, AND AREA RECONNAISSANCE

### 269. Route Reconnaissance

a. In an area where little or no enemy action is anticipated, the armored cavalry troop may be assigned up to three secondary routes. When enemy action is imminent or anticipated, reconnaissance missions are usually assigned on the basis of one major route per troop.

b. When enough helicopters are available, at least one should be employed with each troop conducting reconnaissance. It may be used for aerial observation, command, or control.

c. The aerial surveillance platoon of the division aviation company, if operating under control of the squadron, may be employed as follows:

- (1) The visual and photographic section may be assigned the responsibility for coverage of one or more specific routes or areas to the front and flanks.
- (2) The aerial radar section is normally employed during periods of limited visibility to provide an indication of enemy location or movement along the squadron route.
- (3) The drone section provides night and day photo coverage.

d. The ground radar equipment at squadron and troop level is employed as discussed in paragraph 267.

### 270. Zone Reconnaissance

a. In a zone reconnaissance the squadron commander assigns troop zones and indicates the boundaries for each troop. Supporting aircraft may also be assigned a zone of reconnaissance or may act in support of individual troops.

b. The armored cavalry troops are responsible for reconnoitering all routes and terrain between their established boundaries. The number of troops to be employed, and the use of Army aircraft, depend on the current situation and are directly influenced by the width of the zone, terrain, capabilities of the enemy, availability of friendly ground and air units, and time available. A troop should be assigned a zone containing not more than three



secondary routes of advance. The squadron command post and squadron trains advance by bounds on the best road available in or near the center of the squadron zone.

c. The aerial surveillance platoon is employed as discussed in paragraph 269.

#### **271. Area Reconnaissance**

a. When conducting area reconnaissance the specific area to be reconnoitered by each troop is designated by a boundary line that completely encloses the area. The armored cavalry squadron performs area reconnaissance by assigning zones of reconnaissance within its area to the armored cavalry troops.

b. The armored cavalry troop performs the reconnaissance of its designated area by first moving to the area over a direct route usually designated by the squadron commander, and then performing the reconnaissance mission using the same techniques as for zone reconnaissance. See paragraph 166.

#### **272. Formation for Reconnaissance**

In the performance of a reconnaissance mission, the armored cavalry squadron usually advances in multiple columns. The number of troops committed is determined by the mission, known enemy situation, terrain, and the weather (visibility).

### **Section III. CONDUCT OF RECONNAISSANCE OPERATIONS**

#### **273. General**

a. In general, reconnaissance missions are executed aggressively, making full use of the squadron's mobility. While at times the mission assigned to the squadron can be accomplished by stealth, the squadron must be prepared to engage in combat to accomplish its mission. The squadron commander coordinates and directs the efforts of the armored cavalry troops and supporting aviation. When contact is made, each element of the squadron must develop the situation to determine the strength, composition, and disposition of the enemy. When the resistance cannot be overcome by a platoon or troop attack, the squadron commander may commit additional forces, or he may order the engaged unit to disengage and bypass the enemy in order to continue the reconnaissance mission.

b. Reconnaissance missions assigned to the squadron will frequently require the commitment of all troops; however, if a portion of the squadron is uncommitted, it may be designated as a reserve.

## **274. Action on Contact**

When enemy contact is made or an obstacle is encountered, the situation must be developed quickly. Special effort must be made to determine the flanks of the enemy position so that it can be bypassed, unless the mission requires otherwise. When required, an attack, mounted and dismounted reconnaissance, or reconnaissance by fire are the actions that can be taken to develop the situation.

## **275. Control During Reconnaissance Operations**

*a.* The squadron commander controls and coordinates the operations of his troops from a position affording communication with all troops. He is prepared to move rapidly to any portion of the squadron area to closely supervise and direct action by any element of the squadron. The squadron commander usually operates with a command group containing necessary control facilities.

*b.* Control measures are used only to the extent necessary for coordinating the efforts of the various elements of the squadron and preventing interference between troops. Maximum freedom of action should be granted to the troop commanders in the conduct of reconnaissance missions.

## **276. Reconnaissance Orders and Instructions**

*a.* Instructions may be issued to the squadron commander either orally or in written operation orders. Priorities should be established when more than one mission is assigned. The squadron commander then allocates tasks to the armored cavalry troops.

*b.* Instructions by the squadron commander may be issued orally, by an overlay-type operation order, or by a combination of both. When possible, troop commanders should be assembled for the issuance of an order initiating a new action. This is important to ensure complete understanding and to coordinate measures pertaining to fire support and movement during the operation. Objectives and routes or zones are assigned by the squadron commander. After the operation is under way, fragmentary orders are usually issued by radio. Other means frequently used to deliver instructions include messengers, Army aircraft, and members of the squadron staff.

## **277. Transmitting Information by Elements of the Squadron**

*a.* Prompt transmission of accurate information is essential to the success of any reconnaissance mission. The use of a standing

operating procedure facilitates transmission of important information. Information of first contact with the enemy or terrain information vital to a higher headquarters must be transmitted at once.

b. The squadron staff must ensure that all information of the enemy and terrain is reported to division headquarters, disseminated to appropriate elements within the squadron, and made available for use in planning squadron operations. Information is normally reported to division headquarters over the division intelligence net. It may be reported over the division command net if the information is of sufficient importance.

c. Supporting Army aircraft may be used to facilitate the transmission of information, for radio relay, or to transport messengers, liaison officers, or other personnel.

## CHAPTER 19

### SECURITY OPERATIONS, ARMORED CAVALRY SQUADRON

---

#### Section I. GENERAL

#### 278. General

*a.* In the execution of security missions, the armored cavalry squadron engages in combat as necessary. The armored cavalry squadron accomplishes its security missions by employing the armored cavalry troops alone or reinforced, as may be required. The armored cavalry troops conduct offensive, defensive, or retrograde actions as required to accomplish the mission. Airborne observers and aerial surveillance equipment extend the range of security operations. The activities of all elements operating under squadron control, ground and air, are interrelated. The information obtained through aerial reconnaissance is used to facilitate ground operations by the armored cavalry troops and vice versa.

*b.* Normal combat support for the squadron includes Army aircraft, artillery, engineers, and tactical air. Additionally, the squadron may be reinforced with tanks and infantry.

*c.* The squadron is designed to provide security for the division or major subordinate commands of the division. It may be employed as an advance guard, rear guard, covering force, screening force, or as a rear area security force. When used as a covering force, the squadron should be reinforced with tanks and mounted infantry.

*d.* For additional considerations, see chapter 12.

#### 279. Frontage for Security Operations

Because of its mobility and extensive communication system, the armored cavalry squadron may be employed over extended frontages when engaged in security operations. The armored cavalry squadron of the armored division can execute a covering force in offensive, defensive, or retrograde operations over a frontage containing up to four major avenues of approach. The squadron in the infantry division can adequately cover a frontage of three major avenues of approach.

## 280. Liaison in Security Operations

In performing security missions, the armored cavalry squadron should maintain close liaison with units concerned with the mission and with adjacent units. The squadron commander will use his designated liaison officers in this function. Within the armored cavalry squadron, platoon leaders and troop commanders maintain command liaison.

## Section II. ADVANCE GUARD

### 281. General

*a.* The advance guard operates to ensure uninterrupted advance of the main body. It moves in a formation from which it can deploy promptly and aggressively when opposition is encountered. The advance guard commander uses all the means available to him to overcome enemy resistance or, if this is beyond his capability, to develop the situation fully. The advance guard will not bypass enemy resistance unless so ordered by the main body commander. The main body commander, however, may order the advance guard to find a bypass around the enemy resistance that the main body can use, or he may order the advance guard to contain the enemy force while the main body bypasses.

*b.* The squadron may provide the advance guard for the division. Additional tank strength may be attached to the squadron when it is assigned this mission. Artillery, engineer, tactical air, and Army aviation support are normally available to the squadron.

### 282. Conduct of the Advance Guard

*a.* When the squadron is on one axis, the squadron commander may reinforce the leading troop with tanks, infantry, and Army aircraft. He ensures that the squadron is capable of attacking from march column. When the squadron encounters enemy resistance, the leading troop attacks promptly to dislodge the enemy or to develop the situation. If the attack of the leading troop fails to dislodge the enemy, the squadron commander promptly launches a squadron attack. Using elements of the leading troop and available supporting fires as the base of fire, the squadron commander maneuvers other elements of the squadron to strike the flank of the hostile force.

*b.* When the squadron is on two or more axes, the squadron usually advances with the squadron, minus, on the most important axis and with one or more troops on each of the other axes. The

actions of the lead troops are as discussed in *a* above. The elements of the squadron not initially committed must be prepared to assist the leading elements. The squadron commander will launch a coordinated squadron attack when required to ensure the uninterrupted advance of the main body.

### Section III. FLANK GUARD

#### 283. General

*a.* The flank guard protects the main body from ground observation, direct fire of hostile weapons, and surprise attacks. The flank guard may be mobile or stationary, depending on the actions of the main body.

*b.* As a flank guard for the division, the squadron normally protects one flank. It may protect both flanks of the division by employing the bulk of the squadron on the flank where the enemy threat is more likely to develop, with a portion of the squadron, usually an armored cavalry troop, protecting the other flank. This troop is normally attached to the combat command or battle group on that flank.

*c.* The higher commander will specify the units to be protected or the zone of responsibility. In an offensive situation, the flank guard responsibility extends from the rear of the leading battalion task force or battle group to the rear of the combat elements of the division, or as otherwise specified. When performing a mobile flank guard mission, the armored cavalry squadron operates along a route that generally parallels the axis of the main body and that provides rapid access to key terrain dominating likely avenues of approach. If the main body halts, the squadron establishes blocking positions on this key terrain to protect the flank. The leading troop acts as advance guard for the squadron, secures the area between the main body route or axis of advance for the squadron, and maintains contact with the rear of the leading element of the main body. In a defensive operation, the flank is usually designated as an area extending from one specified terrain feature to another. In a retrograde operation, the flank is normally designated from the rear of the rear guard to a specified unit or terrain feature designated by the main body commander.

*d.* There are occasions when, due to terrain restrictions or enemy activity, it is not possible for the flank guard to move on a route separate from the routes used by the main body until after an initial penetration has been effected. In such situations, it is necessary that elements of the flank guard be temporarily integrated into the column of the main body for forward movement.

When the armored cavalry squadron is assigned the mission of protecting a flank of the division, and separate routes are not available until after the penetration is made, it is desirable that the leading battle group or battalion on that flank be followed by an armored cavalry troop. This troop moves with the main body until it is necessary to occupy blocking positions beyond the initial penetration, at which time it leaves the column and moves directly to the blocking position. Other elements of the squadron are spaced throughout the column as may be required to permit occupation of subsequent blocking positions. After blocking positions have been occupied by elements of the squadron, subsequent movement usually is conducted by bounds.

e. Reconnaissance helicopters and observation aircraft will normally be placed in support of the squadron. Transport helicopters, when available, are used to airlift ground elements to critical locations where detailed reconnaissance, observation, or defensive action is required.

#### 284. Flank Guard, Planning and Conduct

a. *Planning.* For a flank guard mission the squadron commander makes plans to move the squadron in column formation on the flank of the main body and to seize and occupy blocking positions as necessary. Planning provides for locating the command post centrally in the column, and for combat trains to accompany the command post. It is usually desirable to leave the squadron field trains with the trains of a nearby combat command or battle group in the main body to ensure their protection. When the main body is halted or in a defensive posture, the flank guard corresponds to a general outpost. If available, Army aircraft should be placed in support of each troop and assigned missions that extend the reconnaissance capability of the squadron to the flank and front. An artillery liaison officer and possibly a forward air controller should be available to accompany the squadron commander and assist in planning for supporting fires.

b. *Conduct.* The squadron commander ensures continuous reconnaissance by air and ground means, and keeps the main body commander informed of enemy activity on the flank. He employs the troops in a manner corresponding to that described in paragraphs 171 through 174. If a threat develops on the flank in a moving situation, the squadron commander protects the main body by occupying blocking positions. He resists enemy action by offensive, defensive, or delaying action, or a combination thereof, and in so doing, provides time for the main body to react to the enemy threat. If a covering force is operating on that flank, he establishes and maintains contact with it.

## Section IV. REAR GUARD

### 285. General

Elements of the armored cavalry squadron may be employed as a rear guard for the division or major subordinates element in both retrogrades and offensive operations. It may be reinforced with tanks and engineer elements in addition to artillery support and Army aircraft. The rear guard follows behind the main body, and executes delaying actions if the main body is threatened. All routes to the flanks of the axis of advance or withdrawal of the main body are reconnoitered. Army aircraft are employed on reconnaissance or surveillance missions.

### 286. Squadron as Rear Guard

a. The squadron commander selects positions along the route or routes of the main body from which the squadron can protect the main body against enemy action. He maintains contact with the rear of the main body.

b. Movement of the rear guard is regulated on the movement of the main body. It may move according to time or distance intervals. The squadron is moved so that a suitable delaying position is between it and the rear of the main body. Formations are adopted that concentrate the bulk of the squadron in a central location. In order to accomplish this, a rear guard is designated for the squadron, consisting of one or more armored cavalry troops. It is deployed to cover the routes of advance or withdrawal for the main body. The remainder of the squadron marches between the main body and the squadron rear guard. When the squadron rear guard is attacked by the enemy, the squadron commander may employ the remainder of the squadron on previously selected delaying positions or execute a counterattack.

## Section V. COVERING FORCE

### 287. General

A covering force operates to the front, flanks, or rear of the main body beyond the local security elements. Its mission is to give early warning of enemy approach, develop the situation, destroy enemy forces within its capabilities, disorganize and inflict maximum delay on the enemy, and deceive the enemy as to the location of the main body.

### 288. Squadron as Covering Force

a. *General.* The squadron may be employed as a covering force for the division in offensive, defensive, and retrograde operations.



When so employed, it should be reinforced with tanks, engineers, artillery, Army aviation, and tactical air.

*b. Planning.* When the squadron is not in contact with the enemy, the squadron commander normally plans to advance on a wide front to establish contact. Until contact is established, the squadron employs zone reconnaissance techniques, and his plan assigns zones to be reconnoitered by the armored cavalry troops. Army aircraft are used to extend the range of reconnaissance, to the front and flanks. If the squadron has been reinforced, the squadron commander may designate a reserve. Plans also provide for the withdrawal of the main body and subsequent employment of the squadron.

*c. Conduct.* In the execution of a covering force operation, the armored cavalry squadron moves aggressively to develop the situation and to ensure that the enemy does not threaten or surprise the main body.

- (1) During an advance to contact, small enemy forces may be bypassed by the covering force; however, the covering force commander must notify the main body commander. A small force may be left to maintain contact with the enemy. The reserve, if constituted by the covering force commander, may be used to destroy small enemy forces that are bypassed by the leading elements of the covering force and that threaten the accomplishment of the mission, or used to develop the situation and force the enemy to make a show of strength.
- (2) After contact has been gained and the squadron is unable to advance further, or when the squadron is covering the division in a defensive operation, the squadron deceives the enemy as to the location of the main body and delays the enemy effort to advance. Ambushes may be effectively employed by the squadron to add to the delay of the enemy.

## Section VI. SCREENING FORCE

### 289. General

*a.* A screening force protects an area or body of troops from surprise by observing and reporting enemy activity. The mission is accomplished by establishing a series of observation posts and patrols capable of observing enemy approaches into a designated sector. Army aircraft augment the ground capability.

*b.* A screening force is not able to offer strong resistance to the enemy. However, it protects itself and within its capability destroys or disperses small enemy elements.

## 290. Squadron as Screening Force

*a. General.* The squadron may be used as a screening force when operations of the division have created extended flanks or when gaps between major subordinate elements exist that cannot be secured in force or that are not considered critical enough to require security in strength. Screening operations require use of mission-type orders and decentralized execution by troops and platoons.

*b. Planning.* The area to be screened is divided into troop zones by the squadron commander. The troops screen their zones by establishing observation posts and patrols. Army aviation is integrated into the overall plan to augment the ground screen. Usually no reserve is maintained at squadron level due to the extended frontage involved and the resulting dispersion of troops. Critical avenues of approach may receive additional fire support or may be assigned to troops having narrow zones.

*c. Conduct.* When required by enemy action, the squadron commander influences the action by providing fire support and by moving troops to previously designated screening positions. Every effort is made to keep the screen intact while maintaining contact with the enemy. Ground radars are shifted between previously prepared positions as required to gain maximum use of the capability of this equipment. The squadron commander may maneuver unengaged forces to assist other elements heavily engaged.

*d. Army Aviation Support.* Reconnaissance helicopters and observation aircraft enable each troop to better screen its assigned area. The aerial surveillance platoon is used for visual and photo surveillance across the entire squadron sector. The aerial radar equipment is used to extend the range of observation to the front and flanks.

## Section VII. REAR AREA SECURITY

### 291. General

A rear area security force protects rear area units and installations and guards routes of communication from hostile airborne, air landed, and guerrilla attacks and from infiltration. Coordination with other units and with installations in the area of operations is essential. Communication and liaison must be maintained with these units and installations.

### 292. Protecting Routes of Communication

The method employed to guard routes of communication varies according to the terrain, the road net, the length of the routes of

communication, and the type of enemy action expected. The following two methods usually form the basis of any plan for the security of routes of communication.

*a.* If the routes of communication to be guarded are relatively short, armored cavalry troops are assigned sectors to ensure that the squadron area of responsibility is covered. An outpost system is established to cover likely enemy avenues of approach. The squadron commander retains as large a reserve as possible to counter any enemy threat. This reserve will normally consist of at least an armored cavalry troop.

*b.* If the routes of communication to be guarded extend over a long distance, larger sectors must be assigned to each armored cavalry troop. Sufficient troops are assigned sectors to ensure that both flanks of the routes are covered by observation posts. These observation posts have the mission of giving warning of any enemy threat. The remainder of the squadron is used to patrol the main supply route and to escort convoys through threatened areas. The unit that is escorting a convoy usually holds its main strength in the forward part of the formation and establishes local security to the front, flanks, and rear. The size of the escort will be determined to a large degree by the size of the convoy and the anticipated enemy threat.

### **293. Security Against Airborne, Airmobile, and Guerrilla Attack**

*a. General.* When protecting a rear area against enemy airborne, airmobile, and guerrilla attack, the squadron commander deploys his units by placing observation posts in the vicinity of likely drop zones, landing areas, or potential assembly areas, and by patrolling the entire area. Other elements are positioned so that they can move rapidly to attack any hostile force. The squadron headquarters monitors the division air warning net for information on possible enemy airborne or airmobile activity.

*b. Planning.* The squadron commander reconnoiters his assigned area to determine likely drop zones, landing areas, or assembly areas. Sectors are then assigned to the armored cavalry troops. As large a squadron reserve is designated as is possible. The area is covered by patrols or observation posts. The squadron commander makes plans to move elements of the squadron to any threatened part of the area. If the squadron is reinforced with tanks and infantry, the commander may use these elements to constitute the reserve, which should be centrally located in the squadron area. Army aircraft are used to provide aerial observation, aerial photography, and electronic surveillance. Ground radar is used to cover critical avenues of enemy approach. The effective

use of aerial reconnaissance permits the squadron commander to retain a larger reserve.

*c. Conduct.* The key to success against airborne, airmobile, or guerrilla attack is rapid deployment and the placing of maximum fires on enemy forces during the early phases of the landing or other activity. Movement to reinforce any engaged element must be accomplished rapidly. Scout elements and Army aviation execute continuous reconnaissance of the squadron area to ensure adequate warning of enemy activity.

#### **294. Protecting an Installation**

When an armored cavalry squadron is assigned the mission of protecting an installation, the commander normally designates sectors for the armored cavalry troops, retaining at least one troop of the squadron as a reserve. The organization of the area and actions of the squadron are similar to those in perimeter defense.

## CHAPTER 20

### OFFENSIVE OPERATIONS, ARMORED CAVALRY SQUADRON

---

#### Section I. GENERAL

##### 295. General

The armored cavalry squadron is capable of conducting offensive operations as an economy force or as a task force when appropriately reinforced. It engages in offensive action most frequently to accomplish an assigned reconnaissance or security mission. Attacks by the squadron may be a series of individual troop actions, because of the normal dispersion within the squadron while engaged in reconnaissance and security operations, or the squadron may be required to conduct a coordinated attack. In offensive operations, the squadron may operate directly under division control or it may be attached, in whole or in part, to a major subordinate command. (See FM 17-1.)

##### 296. Employment of Armored Cavalry Squadron in Offensive Operations

In offensive operations conducted by either the armored division or the infantry division, the armored cavalry squadron is normally assigned a security mission.

*a. Penetration.* In the penetration, the armored cavalry squadron is normally employed to provide flank security for the force making the penetration and for maintaining contact with the forces on the flanks. As the force making the penetration advances, the squadron will provide flank security, patrol routes of communication, seize and hold terrain features, or be committed as an independent combat force.

*b. Envelopment and Turning Movements.* In conducting an envelopment or turning movement, the division will usually have both flanks exposed. The armored cavalry squadron is normally assigned the mission of securing the more dangerous flank of the division.

##### 297. Frontage

*a.* The frontage covered by the armored cavalry squadron in the

attack is determined by the mission of the squadron, enemy situation, the terrain and weather, and the troops and supporting fires available. The frontage must be sufficient to allow for maneuver yet not be so wide that elements of the squadron cannot be mutually supporting.

b. The squadron will normally operate over a wide front when performing as a covering force for a larger unit conducting an offensive operation or in open terrain. It will normally operate on a relatively narrow front in order to concentrate available combat power when required to attack a prepared enemy position, when operating in wooded areas and rough terrain, or when limited visibility prevails.

c. When adequate artillery and tactical air support are available, the frontage covered by the squadron in offensive operations may be greater than when such support is light or not available.

## **298. Distribution of Forces**

When conducting an attack, the squadron is normally divided into a maneuvering force and a base of fire. If sufficient forces are available after the requirements of the maneuvering force and base of fire are met, a reserve may be designated. Figure 54 shows typical task organizations for the armored division cavalry squadron and figure 55 for the infantry division cavalry squadron.

## **299. Maneuvering Force**

a. The maneuvering force should consist primarily of tanks and infantry elements. The squadron commander must ensure that the squadron maneuvering force has sufficient tank and infantry strength to provide the necessary combat power. Scouts are employed to provide flank security for the squadron. If a requirement exists for more infantry in the maneuvering force than can be provided from available rifle squads, scout elements may be employed in the maneuvering force. If used in a mounted attack, scouts may accompany the rifle squads in the armored personnel carriers.

b. The maneuvering force makes the main effort, closing rapidly with the enemy, using fire and movement. It is usually committed in a formation that has both mass and depth. Every effort is made to employ the maneuvering force against an exposed flank of the enemy position rather than penetrate the position. As the enemy position is reached or overrun, assault fires of all available weapons of the maneuvering force are intensified to compensate for the lifting or shifting of supporting fires.
















EXAMPLE A	EXAMPLE B	EXAMPLE C <sup>1</sup>
<p>MANEUVERING FORCE</p>  <p>(-Support squads) (+Tank sections and rifle squads from base-of-fire troop)</p>  <p>(-Support squads)</p>  <p>(-Support squads)</p> <p>COMD GP</p> 	<p>MANEUVERING FORCE</p>  <p>(-Support squads)</p>  <p>COMD GP</p> 	<p>MANEUVERING FORCE</p>  <p>(+Rifle squads from base-of-fire troop) (-Tank sections and support squads)</p>  <p>(-Tank sections and support squads)</p>  <p>(-Tank sections and support squads)</p> <p>COMD GP</p> 
<p>BASE OF FIRE</p>  <p>(+Support squads of troops in the maneuvering force) (-Tank sections and rifle squads)</p>	<p>BASE OF FIRE</p>  <p>(+Support squads of leading troop)</p> <p>RESERVE</p> 	<p>BASE OF FIRE</p>  <p>(+Tank sections and support squads of troops in maneuvering force) (-Rifle squads)</p>
<p>1. Used when terrain dictates use of dismounted elements only in maneuvering force.</p>		

Figure 54. Typical task organizations for an attack, armored division cavalry squadron.













EXAMPLE A	EXAMPLE B	EXAMPLE C (Utilized when terrain dictates use of dismounted elements only in maneuvering force.)
<p><b>MANEUVERING FORCE</b></p>  (+ Tank sections and rifle squads from base of fire troop) (- Support squads)	<p><b>MANEUVERING FORCE</b></p>  (- Support squads)	<p><b>MANEUVERING FORCE</b></p>  (+ Rifle squads and dismounted scout sections from base of fire troop) (- Tank sections and support squads) (Organic scout sections dismounted)
		 (- Tank sections and support squads) (Scout sections dismounted)
<p>COMD GP</p> 	<p>COMD GP</p> 	<p>COMD GP</p> 
<p><b>BASE OF FIRE</b></p>  (+ Support squads of leading troop) (- Tank sections and rifle squads)	<p><b>BASE OF FIRE</b></p>  (+ Support squads of leading troop)	<p><b>BASE OF FIRE</b></p>  (+ Tank sections and support squads from maneuvering force troops) (- Rifle squads and scout sections)

Figure 55. Typical task organizations for an attack, infantry division cavalry squadron.

c. Army aircraft maintain visual contact with enemy units and provide aerial observation to the front, flanks, and rear of the maneuvering force.

### 300. Base of Fire

a. In a squadron attack the base of fire is normally provided by mortars, artillery, automatic weapons, and tactical air, when available. Tanks are not normally employed in the base of fire; however, they may be placed with the base of fire if terrain does not permit their effective employment with the maneuvering force or if the supporting fires provided by mortars, artillery, and other sources are inadequate. Scout elements not employed in the maneuvering force or for security may be used in the base of fire.

b. Available Army aircraft may assist the base of fire through aerial observation and adjustment of fires. Further, helicopters may be used to transport personnel, weapons, and ammunition for the base of fire when movement by vehicles is not feasible.



### 301. Reserve

a. Combat forces should be held out as a reserve only when adequate forces have been allocated to the maneuvering force and the base of fire. The reserve, if designated, may be employed initially to reinforce the base of fire or to provide security. As the attack progresses, the reserve is used to exploit the success of the maneuvering force.

b. When sufficient forces are not available to constitute a reserve, the squadron commander must use other measures to influence the action, such as providing depth to his formation, maneuvering his supporting fires, and making full use of the unit's mobility.

## Section II. PREPARATION FOR ATTACK

### 302. General

In order to accomplish offensive missions quickly and effectively, the armored cavalry squadron attacks with aggressiveness, speed, and violence. The conduct of such attacks requires thorough and deliberate planning. In planning for a squadron attack, the commander must consider how he can best use the terrain over which the squadron will operate, and the troops and fire support available. His plan must be practical and capable of rapid and forceful execution.

### 303. Plan of Attack

Upon receipt of the plan of attack, or operation order, from higher headquarters, the squadron commander begins to formulate his plan of attack. The plan of attack includes the plan of maneuver and fire support plan.

### 304. Control Measures

a. In order to maintain control of his squadron during the attack, the squadron commander uses only such control measures listed below as may be required:

- (1) Assembly areas.
- (2) Attack positions.
- (3) Objectives.
- (4) Lines of departure.
- (5) Time of attack.
- (6) Axes of routes of advance.
- (7) Boundary lines.

- (8) Phase lines.
- (9) Check points.
- (10) Contact points.

b. When the attack is supported by tactical air, artillery, or nuclear weapons, certain additional control measures are appropriate. These are:

- (1) Bomb line.
- (2) No-fire line.
- (3) Nuclear safety line.

c. See FM 17-1 for additional information on the definition and use of these control measures.

### **305. Assembly Area**

The armored cavalry squadron may occupy an assembly area to organize and complete preparations for an attack, resupply, and perform maintenance. The assembly area should be located as far forward as enemy activity and the terrain permit, but if possible, should be out of range of enemy light artillery fire.

### **306. Attack Position**

If an attack position is used, it is the last position occupied before the attacking forces cross the line of departure. Only those elements of the squadron actually attacking will use the attack position. Elements will not normally halt in the attack position; however, when required to do so, they will halt only long enough to assume the prescribed formation and to ensure a coordinated move across the line of departure.

### **307. Objective**

The objective is the focal point for the efforts of the squadron in the attack. It assists in coordination and control. The squadron commander ensures that the squadron objective is subdivided into troop sectors or that separate troop objectives are assigned that fulfill the requirement of the squadron mission.

### **308. Operation Order**

The squadron commander should issue an oral or written order far enough in advance of the attack to permit subordinate commanders time to make a reconnaissance, complete their planning, and issue their orders. If possible, it should be issued from a vantage point overlooking the area of operations. The order must cover all phases of the attack, and may include maps and overlays.

To ensure completeness, it should follow the prescribed form for an operation order.

### Section III. CONDUCT OF ATTACK

#### 309. General

a. Once the squadron attack is launched, it must be executed with violence, using all available firepower. Under cover of the support provided by the base of fire, the maneuvering force closes rapidly with the enemy. From the moment this force is under enemy observation, its movement must be as rapid as terrain permits. Each subordinate commander must be impressed with the fact that personnel and vehicle losses are often proportionate to the time that it takes to close on the objective. When the assault is launched by the maneuvering force, fire is delivered continuously so that when supporting fires are shifted or lifted, the enemy is constantly under heavy fire until he is destroyed or captured. Aggressive leadership at all levels of command increases the chances of success.

b. The squadron commander places himself where he can best control and influence the actions of elements of the squadron. Most often he is with the maneuvering force, where the most important action normally takes place. He should not become so involved with the actions of one element of his command that he is unable to retain control of the entire squadron. During the attack, he depends largely on radio communication to control his troops, but by remaining in a forward position and maintaining personal contact with his troop commanders, he can effectively control the action. The S3, artillery liaison officer, and forward air controller usually accompany the squadron commander. The staff assists the commander in exercising control but must not interfere with the troop commanders in their command prerogatives.

#### 310. Conduct of Maneuvering Force

a. The maneuvering force directs its movement toward the enemy flank or rear, using all available cover and concealment, and drives for the objective aggressively in a continuing movement. Fire and movement techniques may be employed by elements of the maneuvering force to close with and destroy the enemy on the objective.

b. Tanks in the maneuvering force assault the objective in a deployed formation. They use both their machineguns and main armament as they maneuver to close with and destroy the enemy.

c. Rifle squads remain mounted in their armored personnel carriers as long as possible before dismounting. Once dismounted, infantry elements use assault fire as they close with the enemy and destroy those enemy personnel not destroyed by the base of fire or tank weapons. Machineguns mounted on the armored personnel carriers may be used to reinforce the tank fires and support the assault of the dismounted troops.

d. The actual closing with the enemy must be an aggressive, continuous, well-coordinated effort. All enemy personnel who continue to resist after the objective is seized are destroyed.

### **311. Conduct of Base of Fire**

a. On order, all weapons in the squadron base of fire commence firing at designated targets or areas. When the maneuvering force arrives at the objective or masks the supporting fires, the base of fire lifts its fires or shifts them to the rear or flank targets in the vicinity of the objective.

b. Forward displacement by elements of the base of fire may begin when fires are masked. Elements of the squadron in the base of fire prepare for immediate displacement forward for the final assault or upon seizure of the objective.

### **312. Action on the Objective**

a. The actual occupation of the objective is usually the most critical stage of the entire attack. This is the stage during which control is most difficult and the time when an aggressive enemy delivers a carefully planned and coordinated counterattack. Therefore steps must be taken immediately upon seizure of the objective to consolidate the position and to reorganize elements of the squadron.

b. Consolidation of the objective consists of those actions taken to organize and strengthen the position so that it can be used effectively against the enemy. These actions include:

- (1) Establishment of observation posts and dispatching of patrols.
- (2) Displacement of the base of fire to support the continuation of the attack or the defense of the area.
- (3) Submission of requests for artillery and air support.
- (4) Positioning of elements of the squadron to continue the attack or to defend the area.

c. Reorganization pertains to actions taken to restore maximum combat effectiveness of the unit and control. These actions include:

- (1) Reports from troops on their combat status, including disposition and status of personnel, equipment, and supplies.
- (2) Redistribution of personnel.
- (3) Treatment and evacuation of casualties and prisoners of war.
- (4) Resupply of ammunition, fuel, and other supplies.
- (5) Restoration of communication.
- (6) Maintenance of equipment.

### **313. Continuation of Attack**

*a.* Unless orders specify remaining on the objective, the armored cavalry squadron will continue the attack in order to prevent the enemy from reconstituting his defenses, to exploit initial success, or to execute its next mission. The squadron commander should have a complete picture of the overall plan of the next higher commander and make a continuous estimate of the situation to ensure that his actions are in consonance with the plan. By so doing, the squadron commander can adopt formations that will enable the unit to continue the attack rapidly. If this procedure is followed, his troop commanders will need only brief oral orders to resume the advance.

*b.* The squadron halts on intermediate objectives only when the mission, the enemy reaction, or the necessity for reorganization or displacement of supporting weapons makes halting imperative. During such halts, the squadron maintains contact with the enemy by observation, fire, or aggressive patrolling.

### **314. Employment of the Aerial Surveillance Platoon, Division Aviation Company**

Normally the aerial surveillance platoon of the division aviation company is employed under the control of the squadron, and it is used to provide information of approximate enemy strengths, dispositions, and target locations. Aerial radar is employed to detect enemy movement and concentrations, particularly during periods of limited visibility. Aerial photography is used to detect enemy positions, installations, obstacles, and terrain features.

## **Section IV. EXPLOITATION AND PURSUIT**

### **315. General**

*a.* Exploitation is a phase of offensive action that usually follows a successful penetration, envelopment, or turning movement. Dur-

ing an exploitation by the division, the armored cavalry squadron may be employed on reconaissance and security missions or on a combination thereof. Under some circumstances, the squadron may also be employed as an economy force.

b. Pursuit is a phase of the exploitation that has as its primary purpose the capture or destruction of retreating enemy forces. The squadron may perform a reconaissance mission when contact with the enemy has been broken, or it may be given a flank security or covering force mission.

c. Actions of the squadron on reconaissance and security missions are covered in chapters 18 and 19.

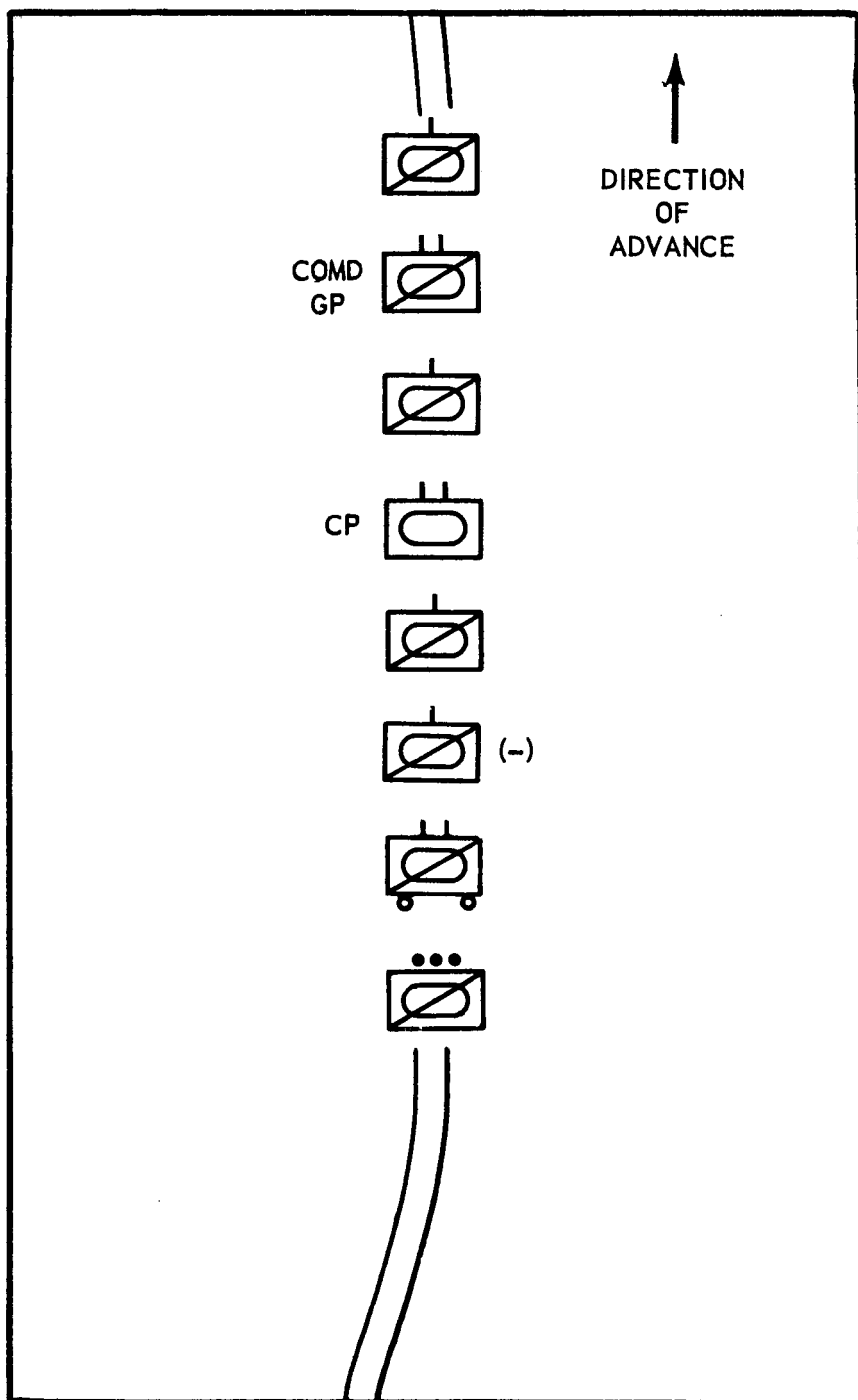
### 316. Armored Cavalry Squadron in Exploitation

a. When the frontage assigned to the division is unusually wide and enemy resistance is weak and disorganized, the division commander may assign an axis or route of advance for the armored cavalry squadron in the exploitation. The squadron's axis or route of advance is normally on one of the flanks of the division; however, the mission is primarily one of exploitation rather than of flank security.

b. The squadron is usually assigned an axis of advance that will allow it to advance in column or multiple columns on the best available road net. The command post should be located near the center of the column, with the command group located well forward. The squadron trains move at the rear of the column, with protection as may be needed (fig. 56). Small enemy forces should be bypassed in the accomplishment of the mission. The next higher commander should be kept informed of the situation, especially with respect to location and estimated strength of any enemy strongpoints that the squadron commander intends to bypass. Small enemy elements may be attacked from march column. Depending on the mission and bypass routes available, an attack may be launched by the squadron, or the enemy may be bypassed. Army aircraft are employed to the front and flanks for reconaissance and maintaining liaison with adjacent units and to assist in command and control. Transport helicopters are used to airlift personnel and equipment to seize key terrain.

### 317. Armored Cavalry Squadron in Pursuit

a. *Encircling Force.* The armored cavalry squadron is best employed as an encircling force. This mission is assigned when the bulk of the division has become engaged with the enemy and a light mobile force is needed to conduct an encirclement. Included



*Figure 56. Typical order of march for the armored division cavalry squadron during an exploitation.*

in such a mission may be the task of cutting the enemy supply lines and of seizure of critical areas on the enemy axes or routes of retreat. Army aircraft are used to reconnoiter routes for the squadron, for command and control, and for rapid movement of small combat elements.

*b. Direct-Pressure Force.* As a direct-pressure force, the squadron advances along its assigned axis, usually employing multiple columns, to close quickly with the retreating enemy. Every effort is made to break through the enemy rear guard and engage the enemy main body. When the enemy has halted and established a defensive position, the squadron continues to maintain constant pressure by fire and employing offensive tactics.



## CHAPTER 21

### DEFENSIVE OPERATIONS, ARMORED CAVALRY SQUADRON

---

#### Section I. GENERAL

#### 318. General

*a.* The armored cavalry squadron may be required to conduct defensive operations in the performance of reconnaissance, security, or economy of force missions. In conducting defensive operations, the squadron may employ the techniques of either the mobile or the position defense, depending on the situation.

*b.* The squadron may conduct or participate in either a mobile defense or a position defense as part of a larger force.

*c.* When operating on a reconnaissance or security mission, the squadron may be forced to adopt a perimeter defense, in which case the techniques of both the mobile defense and the position defense are employed.

*d.* The armored cavalry squadron commander organizes and conducts the defense through application of the following basic considerations (see FM 17-1 for a discussion) :

- (1) Proper use of terrain.
- (2) Security.
- (3) Mutual support.
- (4) Defense in depth.
- (5) All-round defense.
- (6) Fire support plan.
- (7) Strengthening of defensive area.
- (8) Flexibility.
- (9) Maximum use of offensive action.
- (10) Maximum dispersion against nuclear attack consistent with the mission.

#### 319. Employment of Armored Cavalry Squadron in Defensive Operations

*a.* The armored cavalry squadron, by reason of its equipment and organization, is best suited for employment on reconnaissance

and security missions during defensive operations. The squadron will rarely be engaged in independent defensive operations; although in the accomplishment of a reconnaissance or security mission, it may be forced to adopt a defensive posture. The squadron is normally employed as part of a larger force. In mobile defense, it may be employed as a security force, fixing force, or as part of the striking force. In position defense, it may be assigned a mission of occupying a sector of the battle area, as part of the security forces or as part of the reserve.

b. The best use of the armored cavalry squadron in defensive actions is to provide security. The decision to use the squadron to organize strongpoints in the mobile defense or as part of the forces in the battle area in position defense must receive careful consideration by the higher commander. Its employment in this manner should be considered as economy of force measure and should be undertaken only when this need is greater than the reconnaissance or security requirements.

c. The armored cavalry squadron or any of its components may adopt a perimeter defense when halted and a requirement for self-protection exists.

### **320. Squadron as Covering Force in Defense**

a. The armored cavalry squadron may be employed as the covering force for the division in defense. The mission of the covering force is to detect the approach of the enemy, to delay and disorganize his advance, and to deceive him as to location of the main force. The covering force seeks to destroy the enemy within its capability, employing all available supporting fires along with its organic combat power.

b. The squadron, when performing a covering force mission, is normally reinforced with a battalion of artillery, a company of engineers, and elements of the division aviation company. If additional strength is desired, tanks and mounted infantry may be attached.

c. The tactics employed by the armored cavalry squadron as a covering force are basically the same as for a delaying action. The squadron commander organizes his forces to operate on a wide front with little depth. Early development of the situation is essential; therefore, it is important that the division commander receive information of the enemy by the most expeditious means available.

d. The aerial surveillance platoon of the division aviation company will greatly increase the squadron's capability to detect ene-

my movement and location over a wide front, particularly under conditions of limited visibility.

e. For additional information on the employment of the squadron as a covering force, see paragraphs 287 and 288.

### **321. Squadron as Flank Guard in Defense**

a. In either a position defense or a mobile defense, the armored cavalry squadron may be assigned the mission of securing one or both flanks of the division.

b. Whenever possible, the squadron is retained as a unit under the direct control of the division commander for employment on one flank of the division. Should it become necessary to provide security on both flanks simultaneously, the most desirable employment of the squadron would be to retain the squadron, minus one troop, directly under division control on the more critical flank. The detached troop is employed on the other flank with the combat command or battle group.

c. Flank security for forces engaged in either mobile or position defense is provided by the occupation of blocking positions located on key terrain to the flanks of the defensive position or area. The positions occupied should be selected to cover the most likely enemy avenues of approach from the flanks, with the intervals between them covered by aerial or ground observation and patrols. Supporting fires should also be planned to cover these areas. The medium range ground radar set organic to the squadron, and the short range ground radar sets organic to the troops should be employed to supplement ground and aerial observation and surveillance, particularly during periods of limited visibility.

d. The flank guard has the mission of providing early warning of enemy approach and of delaying, disorganizing, and disrupting approaching enemy forces. This is done to provide the main body with the time and space necessary to orient all or part of the defense to counter this threat.

e. Maximum use should be made of Army aircraft to extend the limits of observation of the flank guard. The aerial surveillance platoon will add materially to the area that can be adequately covered by the squadron in performing a flank security mission.

### **322. Squadron Filling a Gap in the Defense**

Security of areas between forces occupying dispersed defense positions is a mission which may be assigned to elements of the armored cavalry squadron. The responsibility for such areas is normally assigned to the forces occupying defensive positions. One

or more troops may be attached to a combat command or battle group occupying a defensive position for the purpose of filling a gap and maintaining contact with an adjacent unit.

### **323. Squadron Providing Rear Area Security in Defense**

The armored cavalry squadron may be employed to provide rear area security for the division. The procedures outlined in chapter 19 cover the actions of the squadron in this type of operation.

### **324. Employment of Ground Radar Equipment**

In defensive operations, the medium range ground radar set in the squadron headquarters and headquarters troop, and the short range ground radar set in each troop are used to supplement the security efforts of the squadron. These devices are employed well forward at observation posts where their effectiveness is not hindered by terrain or vegetation. Alternate and supplementary positions should be established and accurately located on the map to permit rapid displacement of ground radars as the situation requires. They are used to monitor likely enemy avenues of approach, scan key terrain, or maintain surveillance over gaps between friendly elements. During daylight, the radar may be employed to supplement visual observation or to monitor a particularly dangerous avenue of approach. Their greatest value is during periods of limited visibility.

### **325. Employment of Aerial Surveillance Platoon of the Division Aviation Company**

When the aerial surveillance platoon of the division aviation company is under operational control of the armored cavalry squadron, it is used primarily on surveillance missions to detect enemy movement and to give early warning of enemy attacks. During daylight hours, visual surveillance to the front and flanks is maintained. Enemy strengths, movements, and target locations are reported. Both day and night aerial photo missions are conducted. The aerial radar is best employed during darkness or other periods of limited visibility with the most valuable information being acquired from activity in enemy rear areas.

## **Section II. ORGANIZATION OF DEFENSE**

### **326. General**

This section discusses techniques employed by the armored cavalry squadron and its subordinate elements undertaking any type

of defensive action. It includes a discussion of the reconnaissance, selection, preparation, and strengthening of defensive positions; the planning for use of supporting fires; and surveillance plans. For further discussion of these topics, see FM 17-1.

### **327. Reconnaissance and Selection of Position**

The squadron commander makes as complete and detailed a reconnaissance of the area as the time and situation permit. This should include a map, ground, and aerial reconnaissance of the squadron sector. From this reconnaissance, the squadron commander determines the key terrain features and the likely enemy avenues of approach. He selects positions for the armored cavalry troops that cover the likely enemy avenues of approach.

### **328. Organization and Preparation of Defensive Position**

*a.* Troop strongpoints are usually organized to control key terrain features. The location of these positions depends on the importance of the terrain and the approaches that they dominate. Supplementary and alternate positions are selected for each troop and prepared to permit the squadron commander to withdraw his forces or shift them to other positions to prevent their capture or destruction, or to draw the enemy into an area suitable for counterattack. Forces occupying strongpoints may or may not be mutually supporting by fire, depending on the area to be defended by the squadron and the nature of the terrain; however, complete coverage of the entire squadron sector is maintained by either ground or aerial observation, listening posts, and patrolling.

*b.* The squadron commander indicates to his troop commanders a general trace of the FEBA and the troop boundaries, and designates strongpoints that each troop will prepare for occupation on order.

*c.* If the width of the sector and the terrain permit, the squadron commander disposes his force in a manner that will provide depth to his squadron sector. This is normally accomplished by placing one or more troops in depth.

*d.* The squadron commander must make provisions for security during the organization and preparation of the position. He may charge each troop with the responsibility for its own security, or he may assign this mission to one troop that will later be positioned in depth.

*e.* The squadron command post is normally located well to the rear, where it will receive protection from the tactical disposition

of the troops. The squadron trains are usually located near the command post.

### **329. Strengthening the Position**

Strengthening of a squadron defensive position includes the measures taken in the preparation of the position and counterattack routes. Obstacles, to include mines, are located to divert or stop the enemy attack and to hold the enemy in areas covered by tank, artillery, mortar, and automatic weapons fire. The use of demolitions to destroy bridges, fell trees, and crater roads should be considered in the strengthening of the defensive position. Supplementary positions are prepared and strengthened to be occupied in the event of an enemy attack from another direction. Strengthening of the defensive position is continuous.

### **330. Fire Planning in Defense**

a. Fire planning provides for bringing the enemy under fire as early as possible, for increasing the fire as he nears the defensive position, for breaking up his assault, and for limiting penetrations of the defense. Defensive fires must be carefully planned to ensure that they will be effective during both daylight and darkness.

b. The squadron fire support plan includes detailed plans for coordination of artillery, mortars, tanks, automatic weapons, and tactical air. As soon as the squadron commander has selected his troop positions, a fire support plan is prepared that includes long range fires, close defensive fires and final protective fires to support the troops on line, and fires to support the attack by the striking force or reserve. The squadron commander requests artillery fires through the artillery liaison officer.

c. Fires should be planned on critical areas, such as likely avenues of approach, and on possible enemy assembly areas or attack positions as well as on known and suspected enemy positions.

### **331. Surveillance Plan**

a. It is important that the intervals or gaps between elements of the squadron be secured against infiltration, guerrilla action, or airborne attack during defensive operations. Based on the division plan, the squadron commander develops a plan for the employment of available personnel and surveillance equipment to provide adequate surveillance throughout the squadron area.

b. The troops of the squadron will provide personnel for patrols and observation posts to augment the squadron surveillance plan. Normally, the squadron area is well defined by lateral boundaries

and by phase lines that delineate the forward and rear limits of the area. Contact points are established for coordination between adjacent subordinate units. The plan must provide for the destruction of any groups of enemy detected. See FM 17-1 for additional information.

### Section III. MOBILE DEFENSE

#### 332. General

Elements of the mobile defense consist of the security force, fixing force, and striking force. The armored cavalry squadron may participate in the mobile defense as the security force or as part of any of these elements. The squadron is best suited for employment in the security force, and least suited for employment in the fixing force.

#### 333. Squadron as Covering Force in Mobile Defense

a. When employed as a covering force, the squadron will initially operate well in front of the forward edge of the battle area. Once contact with the enemy force has been gained, it is maintained throughout the covering force action. Maximum use is made of natural and artificial obstacles to impede the advance of hostile forces. For further discussion of covering force operations in defense see paragraph 320.

b. Upon completion of the covering force mission, the armored cavalry squadron may be assigned a new reconnaissance or security mission. Under certain circumstances, the squadron may be directed to reinforce or to constitute the striking force or to occupy a strongpoint.

#### 334. Squadron as Part of Fixing Force

In the mobile defense, the armored cavalry squadron may be required to organize and defend a portion of the forward defensive area as an economy force (fig. 57). This type of mission is not normally assigned to the armored cavalry squadron when other resources are available. If the armored cavalry squadron is assigned this mission, the squadron commander will organize and prepare the position as discussed in paragraphs 326 through 331.

#### 335. Squadron as Part of the Striking Force

The armored cavalry squadron may be employed as part of the division striking force, usually after it has performed a covering force mission and has withdrawn through the combat elements in

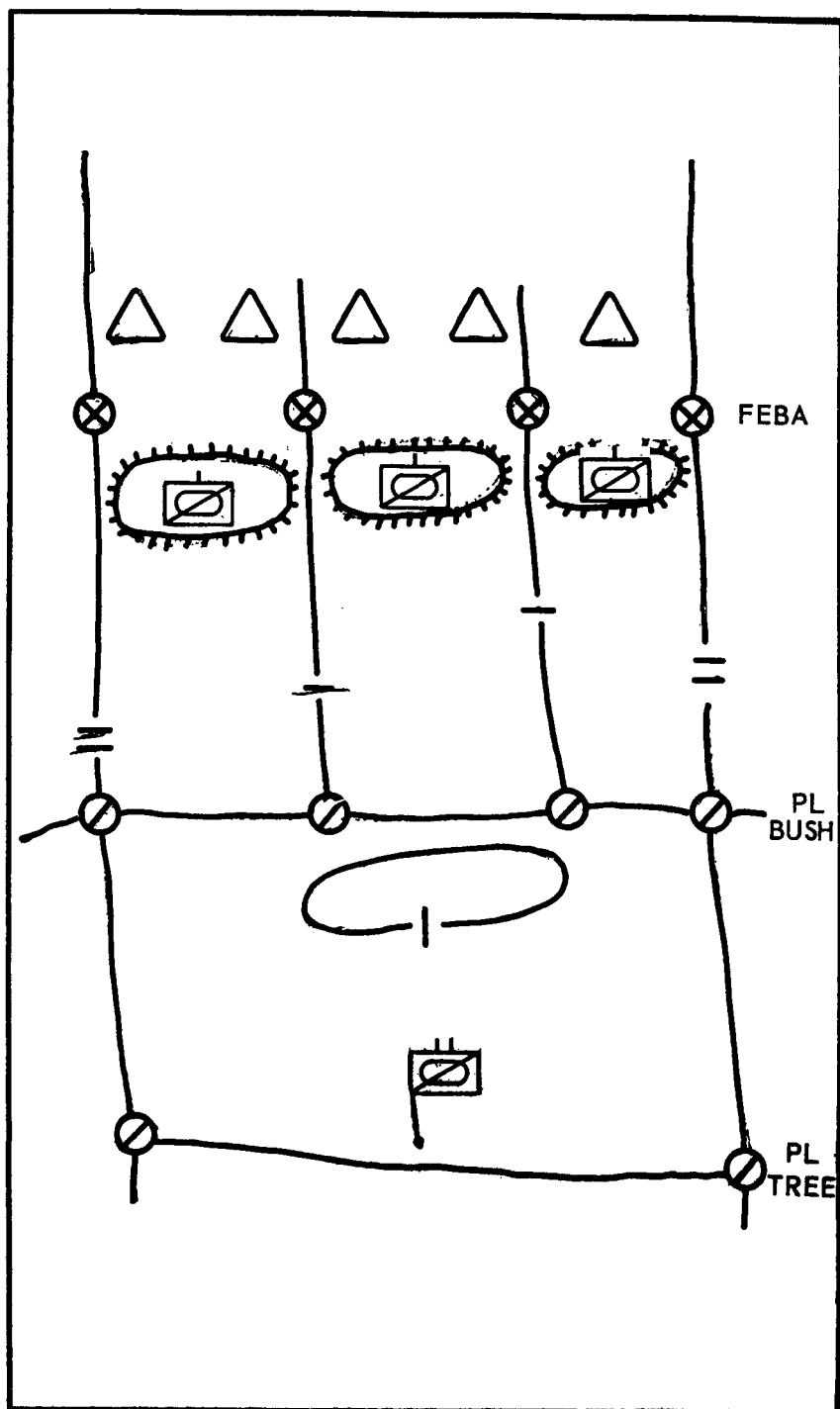


Figure 57. Disposition of the armored division cavalry squadron as a part of a fixing force in mobile defense.



the forward defensive area. The squadron may be appropriately used to perform reconnaissance and security missions for the division striking force. The operations of the striking force are similar to those of normal offensive operations.

## **Section IV. POSITION DEFENSE**

### **336. General**

*a.* In the position defense, the armored cavalry squadron is most effective when assigned missions where it can use its mobility, firepower, and extensive communication system. These missions include:

- (1) Forming a covering force or general outpost for a large force.
- (2) Acting as all or part of the reserve for a large unit.

*b.* In position defense, the armored cavalry squadron may be employed in one or more of the echelons of defense: security force, forces in the battle area, and reserve. The squadron is not normally employed with the forces in the battle area except as an economy force, and then it is assigned a narrow sector or one of relatively minor importance. For details on organization of a defensive position, see paragraphs 326 through 331.

### **337. Squadron as Covering Force in Position Defense**

*a.* As in the mobile defense, the armored cavalry squadron is well suited for employment as the division covering force in the position defense. The squadron is organized and operates the same as in the mobile defense and as discussed in paragraph 320. It initially organizes a position well in front of the forward edge of the battle area.

*b.* Upon completion of the covering force mission, the squadron will normally be assigned a reconnaissance or security mission to the flanks of, in rear of, or within the battle area. The squadron may be directed to reinforce or constitute the reserve or, possibly, to comprise part of the forces in the battle area.

### **338. Squadron as General Outpost in Position Defense**

*a.* The armored cavalry squadron, when reinforced by engineers, artillery, and Army aviation, is capable of being employed as all or part of the general outpost of a division engaged in position defense. The general outpost is controlled by the division commander or higher headquarters. The mission of the general outpost,

similar to that of the covering force, is to give early warning of enemy approach, to disorganize and delay his advance, and to deceive him as to the exact location of the battle area. When a covering force is employed beyond the general outpost, it withdraws through the general outpost and relinquishes its mission to the general outpost.

*b.* When assigned a general outpost mission, the squadron commander immediately initiates reconnaissance of the area, preferably a personal reconnaissance, supplemented by a map or aerial photo study. He then formulates his plan, which includes security measures, disposition and frontages of subordinate units, selection of advantageous delaying positions between the initial general outpost line and the forward edge of the battle area, organization and coordination of organic and supporting fires, and organization of the ground, including obstacles, means for deceiving and disorganizing the enemy, and the procedure for movement to successive positions to the rear.

*c.* Because of extended frontages inherent in this type of operation, intervals between units must be covered by patrolling, aerial and ground observation, and fires.

*d.* Squadron actions during the conduct of a general outpost mission are essentially the same as for a covering force (par. 320). Unless required to delay the enemy for a specified time, the outpost begins its withdrawal to rearward positions as soon as it is apparent that a superior enemy force is deployed for attack and the general outpost is likely to become decisively engaged.

### **339. Squadron as Reserve in Position Defense**

*a. General.* When the squadron is designated as the reserve, it may be employed to plan and execute counterattacks or to prepare positions to extend the depth of the battle area and to protect the flanks and rear of the higher command.

*b. Location.* The squadron should be positioned near a good road net that will permit rapid movement to any portion of the battle area. It occupies a position that will add depth to the defensive system.

*c. Counterattack Plans.* When the armored cavalry squadron is employed in the reserve, it must be prepared to conduct counterattacks against enemy threats. Counterattacks are of two general types: those designed to restore the original positions by striking hostile forces in the flank or rear, and those designed to destroy or disorganize the enemy as he prepares to launch his attack against the forces in the battle area. Plans must be closely coordinated

with adjacent units and with other forces in the battle area to ensure mutual support and to prevent firing into friendly positions. Each counterattack is designed to seize a specific objective. Each counterattack plan normally includes an assembly area, attack position, a line of departure, fire support, formation, direction of attack or axis of advance, objectives, actions upon reaching the objectives, communication arrangements, rehearsals or briefing of troop commanders, and coordinating instructions. Commanders at all echelons should reconnoiter the routes to the assembly area and the area in which counterattacks are to take place and familiarize their troops with the details of the plan.

*d. Conduct of Counterattacks.* Counterattacks are offensive in nature and are conducted the same as a coordinated attack. See chapter 20.

## Section V. PERIMETER DEFENSE

### 340. Squadron Perimeter Defense

*a. General.* Since the armored cavalry squadron frequently operates independently and at a considerable distance from other elements of the division, it must often establish a perimeter defense in order to protect itself as a temporary measure while preparing for some other action (figs. 58 and 59). Usually the situation requiring establishment of a perimeter defense allows little time for detailed prior planning. Each troop on the perimeter is assigned a sector covering possible avenues of approach. Troops organize the ground in as much detail as time permits.

*b. Security.* Each troop on the perimeter normally provides for its own security, employing scouts and ground radars along the trace of a line established around the squadron perimeter. Army aircraft are employed to extend the area of observation, with emphasis placed on the most likely avenues of approach to provide early warning.

*c. Strongpoints.* The minimum force necessary to accomplish the mission of slowing, stopping, and containing the enemy is assigned to the strongpoints. Strongpoints are established on defensible terrain which will provide tactical advantage and from which maximum fire can be delivered upon the enemy. These strongpoints are established in an irregular pattern on the outer edge of the perimeter and the intervals between them must be secured. The organization of forces in the strongpoints is the same as in the mobile defense.

*d. Striking Force.* The squadron commander should constitute

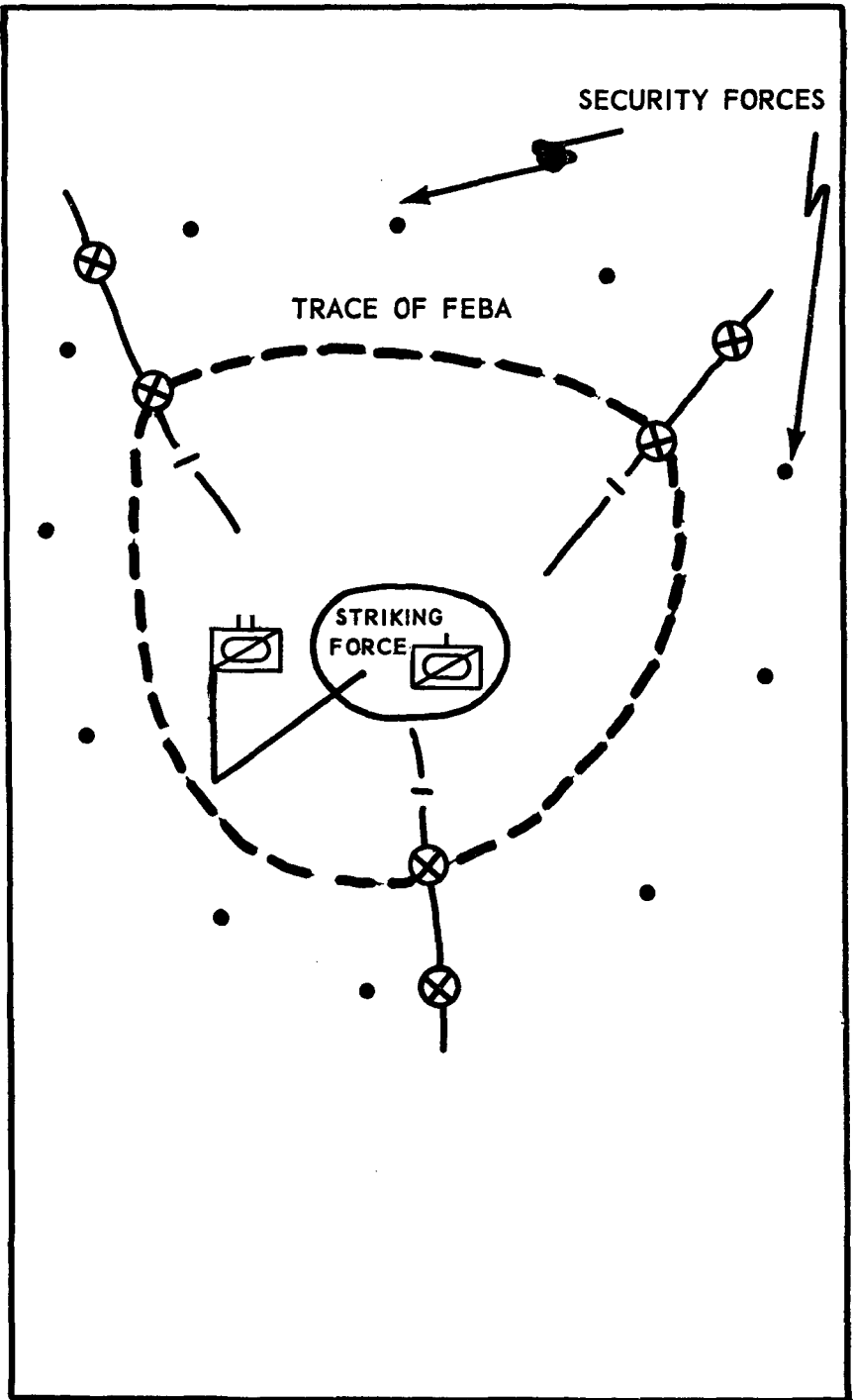


Figure 58. Armored division cavalry squadron perimeter defense.

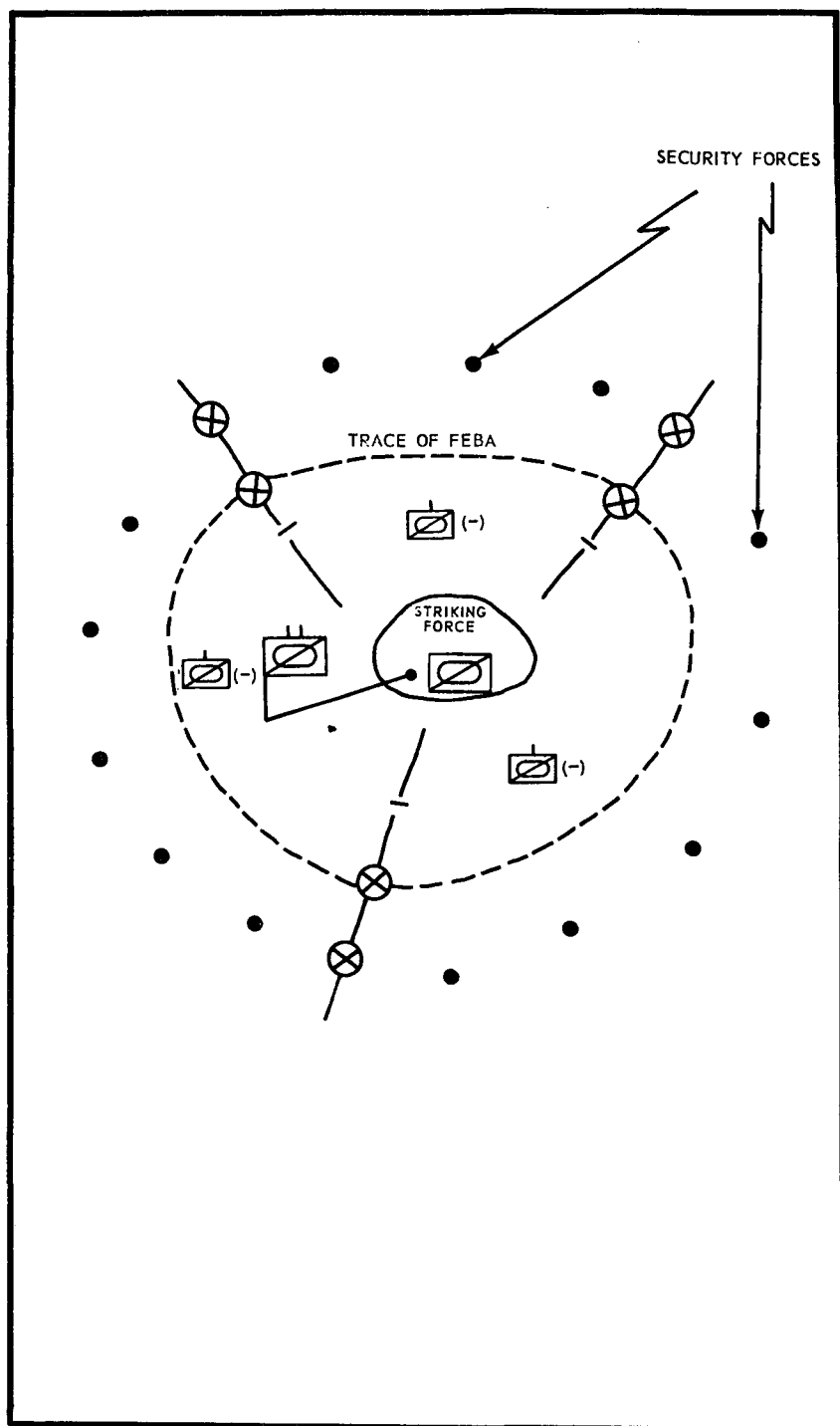


Figure 59. Infantry division cavalry squadron perimeter defense.

as large a striking force as possible. Counterattack plans are prepared to cover likely enemy penetrations. These plans must be as detailed as time and the situation will permit. Any attached tank units should be used in the striking force.

*e. Use of Supporting Fires.* A fire support plan including organic, attached and supporting weapons is prepared. The armored cavalry squadron on an independent mission may have artillery attached. If possible, the artillery should be located to support all elements of the squadron. All available supporting fires should be integrated into the squadron fire support plan.

*f. Conduct of Perimeter Defense.* The conduct of a perimeter defense involves actions common to both the mobile and the position defense. The squadron will employ offensive techniques to protect itself and to ensure that enemy forces do not penetrate any portion of the perimeter in enough strength to threaten the entire defense.

## CHAPTER 22

### RETROGRADE OPERATIONS, ARMORED CAVALRY SQUADRON

---

#### Section I. GENERAL

#### 341. General

a. A retrograde movement is any movement away from the enemy. It may be forced on the squadron by enemy action, be made voluntarily, or be ordered by higher headquarters. Retrograde movements are classified as a delaying action, withdrawal from action, or retirement.

b. Retrograde movements by the armored cavalry squadron require a deliberate plan of action and close control and supervision by the squadron commander. A retrograde movement is usually covered by a covering force or rear guard. Maximum use of available firepower, a carefully executed plan for demolitions and creation of obstacles, and a plan for movement of the unit are essential.

#### 342. Employment of Armored Cavalry Squadron During Retrograde Operations

a. The armored cavalry squadron may provide security for the main body of a larger force by acting as a covering force, as a rear guard, or as a flank guard.

b. When employed as a covering force or rear guard, to protect the withdrawal from action or the retirement of a larger force, the squadron employs the principles and techniques appropriate to a delaying action. When employed in this manner, the squadron may be reinforced with tanks, infantry, artillery, and engineers.

c. When the larger force is conducting a delaying action, the armored cavalry squadron may be assigned a zone in which to perform a delaying action. Preferably, however, it is assigned missions that allow for greater freedom of action than this type of action permits.

### 343. Employment of Surveillance Equipment in Retrograde Operations

During retrograde operations, the organic ground radar equipment and, when available, the facilities of the aerial surveillance platoon of the division aviation company can provide early warning of enemy approach. Ground radar is used to perform surveillance of critical areas immediately surrounding the occupied positions, and aerial radar to perform surveillance at greater distances.

## Section II. DELAYING ACTION

### 344. General

a. A delaying action is a retrograde movement by which a force seeks to delay the advance of an enemy force. A unit engaged in a delaying action must inflict maximum punishment on the enemy without becoming decisively engaged.

b. The armored cavalry squadron may conduct a delaying action by itself or as part of a larger force. When the squadron is employed as part of a larger force, the zone assigned to the squadron will normally permit the squadron to conduct the delaying action by employing troops on line and on successive positions, with each troop using a single route of withdrawal. When the squadron is required to conduct a delaying action alone, the extended frontage usually resulting from independent employment may require the squadron to employ all troops on line and delay on successive positions. In this situation, multiple routes of withdrawal may be used by each troop.

c. An armored cavalry squadron conducting a delaying action will usually be divided into two echelons: the delaying force and the reserve. The execution of the delaying action is decentralized to troop level; however, the squadron commander controls the action by assigning troop zones, designating intermediate delaying positions, and regulating the rearward movement of all subordinate elements.

d. The armored cavalry squadron is capable of conducting independent delaying actions. Its effectiveness is significantly increased by the attachment or support of tanks, artillery, infantry, engineers, Army aviation, and tactical air. Tanks are used primarily in the reserve. Engineers are normally retained under squadron control. Infantry elements are used as part of the delaying force or as part of a tank-infantry team in the reserve.



Army aviation allocated to the squadron should be used to support committed troops.

### **345. Reconnaissance and Selection of Positions for Delaying Action**

*a.* Higher headquarters will assign a zone to the squadron for the conduct of the delaying action, and will indicate the general area of the initial delaying position and each successive delaying position, and specify the length of time that each delaying position must be held.

*b.* Upon receipt of a delaying action mission, the squadron commander makes as thorough a map, aerial, and ground reconnaissance of his zone as time and the tactical situation permit. The most likely avenues of enemy approach to the position are determined, and plans are made to deny their use to the enemy. If the depth of the area of operation permits, squadron delaying positions should be far enough apart to force the enemy to deploy and attack each position. The squadron delays the enemy on all favorable terrain, regardless of distance. Squadron delaying positions are located on terrain to permit coordinated action by all elements of the squadron. When the commander apportions the squadron zone into troop zones, he assigns boundaries between troops so that terrain features that block avenues of approach and control observation and fire on these avenues of approach are included within a troop zone. Boundaries extend forward to the limit of the effective range of troop weapons, rearward through the final delaying position. Each troop zone should include at least one good route of withdrawal.

### **346. Disposition of Forces**

*a.* The squadron commander disposes his troops to cover the most likely avenues of approach available to the enemy in the squadron zone. The actual disposition of troops in any given situation will depend on the commander's evaluation of the factors of METT.

*b.* The squadron command post and squadron trains are located well to the rear, generally as far back as the second position from that occupied by the delaying force, so that they will not interfere with the actions of the combat elements, will not have to displace frequently, and will have a measure of security. The command group will remain well forward with the delaying forces and should control the withdrawal of these forces from each delaying position. It is among the last elements to withdraw.

c. When used, the reserve is initially located in an area from which it can move rapidly to support any threatened point or to execute a counterattack.

### **347. Security**

a. Action must be taken to prevent surprise of the delaying force and to provide early warning of enemy approach. Ground reconnaissance is extended aurally through maximum use of available Army aircraft. The combat support section leader or a designated aviator coordinates Army aviation employment with the squadron commander to ensure effective coverage of the squadron zone. Close coordination with adjacent units is essential. Contact points are designated and liaison personnel are used to keep the squadron commander informed of the situation on the flanks.

b. Because of the nature of a delaying action, the flanks of a delaying force are extremely vulnerable. An armored cavalry unit on a delaying position must establish its own flank security by all-round observation, patrols, and continuous contact with adjacent units. Planning should include consideration of natural obstacles such as rivers, mountains, thick woods, and rugged terrain as flank protection. However, obstacles alone cannot be relied upon to stop a determined enemy. The squadron commander should use his reserve to counter any determined flank action by the enemy and be prepared to withdraw the remainder of the squadron to the next prepared delaying position.

### **348. Use of Obstacles in Delaying Action**

Maximum use must be made of both natural and man-made obstacles during a delaying action. Scout sections and rifle squads both have the capability of performing limited pioneer work. Each unit commander must develop all potential obstacles that will inflict maximum delay on the enemy, that can be covered by fire, and that are authorized by higher headquarters.

### **349. Routes of Withdrawal in Delaying Action**

In a delaying action, the squadron will usually employ successive delaying positions. The selection of routes of withdrawal between these delaying positions is based on the consideration of:

- a. Cover from enemy fire.
- b. Concealment from enemy observation.
- c. A direct route to the next delaying position.
- d. Good trafficability.

## 350. Occupation and Organization of a Delaying Position

*a. General.* The delaying position usually consists of a series of platoon-size positions organized around the tanks of each platoon. The squadron commander, through his troop commanders, ensures that these tanks are positioned on terrain features that dominate likely enemy avenues of armor approach, give long range fires, and facilitate a covered withdrawal. Aside from the greater emphasis on long range fires and covered routes of withdrawal, the occupation of a delaying position is similar to the occupation of a defensive position. In the organization of a delaying position, the commander must ensure that coordination is effected between troops of the squadron in the delaying force, the reserve, and all elements in support of the squadron. He must also ensure that security is provided.

*b. Squadron Reserve.* If organized, the squadron reserve occupies a position that has access to trafficable routes. The position must be organized to serve as a position to block enemy penetrations and, if necessary, support by fire the withdrawal of elements of the delaying force. Trafficable routes are necessary to the reserve to enable it to execute limited-objective attacks and counter-attacks forward of or between delaying positions, to move to other blocking positions, to reinforce the delaying forces, or to move to a position to support by fire the actions of the delaying force.

## 351. Reconnaissance of Successive Delaying Positions

Reconnaissance of successive delaying positions is initiated as soon as possible and before the delaying forces begin their withdrawal. Normally, the executive officer is responsible for accomplishing this reconnaissance. He selects general position areas for all elements of the squadron.

## 352. Ambush in Delaying Position

*a.* An ambush is effective in the conduct of a delaying action; however, the frequency with which it is employed is contingent on and limited by enemy action and terrain. Surprise is essential to the success of an ambush. The squadron, or elements thereof, must be capable of destroying the enemy force that it intends to ambush. Otherwise if the enemy force is too large, the squadron may become so heavily engaged that it will be unable to withdraw. The delay of the enemy, not his complete destruction, is the primary consideration.

*b.* Elements are positioned to deliver maximum fire on the enemy force being ambushed. Fires are delivered to immobilize

the force by destroying the lead and rear vehicles in the column. Tanks are located to deliver direct fire on all vehicles within the ambush. Riflemen are stationed to prevent the escape of dismounted enemy troops. The scout elements may be placed forward to provide security or where they can fire from within the ambush position. Mortars deliver indirect fire to the rear of the ambush to prevent escape of enemy troops and to obstruct enemy reinforcements.

®

### 353. Conduct of Delaying Action

The squadron commander will normally withdraw his troops from a delaying position before they become decisively engaged with the enemy. The squadron continues to delay the enemy in the area between squadron delaying positions by making maximum use of intermediate delaying positions. The squadron reserve may be employed to assist in the withdrawal from the delaying position by conducting limited-objective attacks or counterattacks against the enemy, designed to disrupt and disorganize his attacking forces. Piecemeal commitment is avoided. Counterattack plans cover all logical enemy threats throughout the squadron zone and are disseminated to all units. The reserve may be employed to support by fire the delaying forces, to block an enemy penetration, to reinforce the delaying forces, or to cover the withdrawal of the delaying forces by occupying a delaying position.

### 354. Withdrawal from a Delaying Position

a. The squadron commander may order a withdrawal by elements of the squadron to the next delaying position because of enemy action, to conform to the actions of adjacent units, or to retain the integrity of his combat power.

b. Contact with the enemy is maintained throughout a withdrawal. Every effort is made to receive the enemy and, in particular, to conceal the preparations for the withdrawal to the next position. Unless favorable covered routes of withdrawal exist, it may be more effective to withdraw at night under the cover of darkness.

c. The squadron command post and trains, located well to the rear, should move early to their next location to ensure that they do not interfere with the movement of combat elements. Attached or supporting artillery withdraws by echelon, ensuring that a portion of the unit is prepared to fire at all times.

d. If the reserve is not used to cover the withdrawal of the delaying forces by counterattacking or occupying a blocking posi-

tion, it may withdraw to the next reserve position and prepare for employment at any time.

e. The squadron commander must closely coordinate and control the withdrawal of the squadron. Communication must be maintained with each troop engaged and with adjacent units, to determine when troops should be withdrawn. The withdrawal must be initiated while the delaying force still has freedom of maneuver. Withdrawal is made by subordinate units on squadron order according to prearranged plans. The decision whether to withdraw the most heavily engaged or least heavily engaged units depends on which will allow for the retention of unit integrity and accomplish the mission. Remaining troops are then withdrawn, employing fire and movement and being supported by fires of the elements previously withdrawn.

### 355. Combat Support

a. *General.* In the conduct of a delaying action the squadron will normally receive support of artillery, engineers, Army aviation, and, possibly, tactical air.

b. *Artillery.* Artillery may be attached or placed in support of the squadron during a delaying action. The fires of the artillery must be coordinated with the fires of organic weapons. Primary consideration is given to long range fires; however, plans must also include close in fire support and fires to cover movement to successive positions.

c. *Engineers.* If engineers are available, they normally participate in the delaying action by destroying bridges, blocking roads, demolishing railways, and erecting barriers forward of the delaying positions, and by preparing similar obstacles in rear of the delaying position. Engineers also assist the rearward movement by improving roads and bridges along the route of withdrawal.

d. *Army Aviation.* Aircraft may provide the delaying forces with timely information of enemy activity thus allowing the force to remain longer on the delaying position. Critical observation posts and positions that afford excellent flanking fire on the advancing enemy may be held for a longer period of time when Army aircraft are available. Personnel are transported by helicopters to new locations when they have been cut off.

## Section III. WITHDRAWAL FROM ACTION

### 356. General

a. The armored cavalry squadron may be required to conduct a withdrawal from action in order to better position itself to initiate some other action. Generally, a withdrawal from action is accomplished in two phases: a disengagement from action, followed by the formation of march columns for continued movement to the rear. To disengage from action, the squadron commander may be required to designate a security force to cover the withdrawal of the main body.

b. The boundaries for the squadron zone of withdrawal will extend back to the point where the squadron forms into march columns.

### 357. Orders

See paragraph 227.

### 358. Daylight Withdrawal from Action

a. In a daylight withdrawal from action, the squadron commander may use elements of each front line troop as a squadron security force. This security force covers the withdrawal of the main body and withdraws on order of the squadron commander.

b. When one armored cavalry troop is assigned a security force mission for the entire squadron, it conducts its actions in essentially the same manner as a covering force.

c. When participating in a withdrawal as part of a larger force, the squadron may appropriately be given a security mission to cover withdrawal of the larger force.

d. For other considerations of a daylight withdrawal see paragraph 228.

### 359. Night Withdrawal from Action

a. The squadron may conduct a withdrawal from action at night, when the enemy ability to disrupt the movement is reduced. A night withdrawal from action is conducted in generally the same manner as in a daylight withdrawal; it must be recognized, however, that control is more difficult and movement slower. If possible, all elements withdraw simultaneously. It is sometimes possible for the squadron to withdraw so rapidly that a security force is not required; however, each troop is responsible for maintaining its own security.

b. For other considerations of a night withdrawal see paragraph 229.

## Section IV. RETIREMENT

### 360. General

A retirement is an operation to avoid combat by moving away from the enemy voluntarily. A retirement does not begin until the command is formed into march columns. The armored cavalry squadron usually participates in a retirement as part of a larger force. In this type of operation, the squadron may be directed to form in march column and move to a designated area. The retirement may be preceded by a withdrawal from action and covered by a force executing a delaying action.

**PART SIX**  
**SPECIAL OPERATIONS AND COMMUNICATION**  
**CHAPTER 23**  
**SPECIAL OPERATIONS, ARMORED CAVALRY UNITS**

---

**Section I. GENERAL**

**361. General**

This chapter is a guide for employment in certain special operations in which armored cavalry units may participate. It covers chemical, biological, and radiological monitoring and survey operations, damage control operations, reconnaissance operations behind enemy lines, and airmobile operations. Information on other types of special operations in which armored cavalry units may participate is covered in FM 17-1.

**Section II. CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL  
MONITORING AND SURVEY**

**362. General**

*a.* Armored cavalry units will frequently be required to perform chemical, biological, and radiological (CBR) monitoring or be assigned CBR survey missions. This section discusses the conduct of these operations in general terms, as applicable to armored cavalry units, and explains the terminology used to describe monitoring and survey operations.

*b.* Armored cavalry units will perform CBR monitoring as a normal part of their routine activities. Survey missions will be assigned to these units as required by the situation. Army aircraft may be used for aerial radiological monitoring and survey when large areas are to be surveyed and when time is critical.

*c.* For additional information concerning radiological monitoring and survey and chemical and biological detection, see current DA Training Circular 101-1 and FM 21-40.

**363. Definitions**

*a. CBR Monitoring.* The process of determining the presence



and, when possible, the degree and type of chemical, biological, and radiological contamination in an area. It includes any combination of the following:

- (1) *Chemical monitoring.* Efforts taken to detect and, when possible, identify toxic chemical agents, generally by use of a chemical agent detector kit.
- (2) *Biological monitoring.* Efforts taken to collect samples of biological agents, by means of sampling kits, when available.
- (3) *Radiological monitoring.* Efforts taken to detect and measure radiation, through the use of radiac instruments.

*b. CBR Survey.* A systematic search to determine the location, extent, degree, and, where possible, type of CBR contamination in an area. Survey parties are organized to conduct thorough searches as follows:

- (1) *Chemical survey.* An organized search to determine the location and extent of contamination in an area.
- (2) *Biological survey.* Same as chemical survey except the search is for biological agents.
- (3) *Radiological survey.* An organized search to determine the location, extent, and dose rate of radiation in an area.

*c. Survey Party.* A survey party normally consists of a monitor and an assistant. The survey may be made mounted in a vehicle or aircraft or dismounted as required by the type of contamination. The assistant may drive and operate the radio. A survey party may be augmented by additional personnel for security or other reasons.

*d. Control Party.* A control party is a group of individuals that coordinates the efforts of one or more survey parties under its control and reports CBR data to the appropriate higher echelon, radiological center (RADC), or chemical, biological, and radiological section (CBRS) of division or higher headquarters.

*e. Survey Team.* A survey team consists of a control party and two or more survey parties.

### 364. Monitoring Operations

*a.* CBR monitoring is a command responsibility performed by all armored cavalry units. It is essentially a protective measure to detect the presence of CBR contamination.

*b.* All armored cavalry units have radiac instruments, which they use to perform radiological monitoring. A monitor and as-

sistant monitor should be trained to operate each radiac instrument authorized.

c. Radiological monitoring activities may be conducted on a periodic or continuous basis. While a unit is moving, designated personnel will perform continuous radiological monitoring to prevent movement into the area of dangerous radiation without warning. When the unit has occupied a position or an area, periodic monitoring may suffice.

### **365. Survey Operations**

a. When an armored cavalry unit is assigned a survey mission, the size and composition of the survey team is based on a consideration of the personnel available, equipment on hand, the size of the area to be surveyed, the road net in the area, and the specific information desired. CBR protection must be afforded to survey personnel. The cumulative dose of radiation acquired by an individual must also be considered. Personnel will not normally be permitted to exceed dosages specified by command guidance.

b. Radiological survey missions are normally conducted by platoon-size unit under the control of the armored cavalry squadron. Although each armored cavalry platoon headquarters is capable of acting as a control party. The platoon can provide up to four survey parties by using each scout vehicle and crew as a survey party.

### **366. Reporting CBR Data**

a. Information obtained while conducting CBR monitoring operations should be forwarded through command channels.

b. CBR data gathered during the conduct of a survey operation is reported directly to the division RADC or CBRS or through command channels, depending on the type of survey being conducted.

## **Section III. DAMAGE CONTROL**

### **367. General**

a. Damage control operations consist of measures taken before, during, and after a mass-destruction attack or natural disaster to minimize the effects thereof. In forward areas these measures are directed primarily toward minimizing interference with tactical operations and the loss of control.

b. Damage control activities are a command responsibility and the commander at each echelon is responsible for damage control training and implementation of damage control plans. Effective implementation of damage control measures results from detailed prior planning, training, and supervision by commanders.

c. See FM 17-1 and FM 17-50 for additional information on damage control operations.

### 368. Squadron Damage Control Operations

a. The armored cavalry squadron is well suited to perform damage control operations. Frequently, the squadron, or a portion thereof, may be required to perform damage control operations in the squadron area or in the area of another unit. If other assigned tasks do not interfere, subordinate elements of the squadron as organized may be employed in the performance of damage control operations. Frequently it may be necessary for the squadron to conduct damage control operations in conjunction with tactical missions. Under these circumstances, it may be necessary to organize and commit provisional damage control units.

b. The organization of the squadron damage control elements is usually prescribed in the squadron SOP. Type organizations that might be established are:

- (1) *A control and assessment team (CAT)*. This organization is used as the squadron command and control headquarters for the conduct of squadron damage control activities.
- (2) *Heavy rescue squad*. This squad will be organized at squadron level to assist the CAT in the performance of damage control operations.
- (3) *Light rescue squad*. One of these squads will be organized by each armored cavalry troop to assist in the performance of squadron damage control operations as directed by the CAT.

### 369. Troop Damage Control Operations

a. The armored cavalry troop or portions thereof may be required to participate in damage control operations. As stated in the squadron SOP, the troop is responsible for organizing and training personnel to perform damage control functions. Elements of the troop as organized or as a provisional unit may perform these functions. A type unit employed is the light rescue squad that normally operates under control of a designated non-commissioned officer.

b. The functions of damage control elements furnished by the armored cavalry troop are to:

- (1) Rescue and remove casualties from affected areas.
- (2) Administer first aid.
- (3) Evacuate vehicles and other major items of equipment from the affected area.
- (4) Perform limited decontamination.

## Section IV. RECONNAISSANCE BEHIND ENEMY LINES

### 370. General

a. On a battlefield characterized by dispersion of units and vaguely defined lines of contact, armored cavalry elements of squad-, section-, or platoon-size must be prepared to operate behind enemy lines or intermingled with enemy forces. When these cavalry units are thus disposed as a result of deliberate planning or of being isolated by enemy action, they must capitalize on this excellent opportunity to collect and report any information that cannot be obtained by other means.

b. This type of operation requires the utmost in aggressive and imaginative leadership by junior leaders and the ability of small armored cavalry units to operate independently.

c. These operations are not intended to compete with or replace the need for special forces or clandestine personnel, but rather to exploit a valuable means of gathering information of immediate tactical value to the larger unit commander.

d. An understanding of the information contained in FM 21-75 on actions of individuals involved in scouting and patrolling activities is essential to this type of operation.

### 371. Missions

Small armored cavalry elements operating behind enemy lines are particularly effective in accomplishing the following missions:

- a. Air or artillery target selection, particularly of nuclear targets.
- b. Observation and control of air or artillery strikes.
- c. Damage assessment.
- d. Radiological monitoring or survey.
- e. Route and area reconnaissance.
- f. Location and identification of units and installations.
- g. Engineer reconnaissance.
- h. Surveillance over routes and enemy lines of communication.

### 372. Methods Employed to Get Behind Enemy Lines

Methods that may be employed by armored cavalry elements to get behind enemy lines include:

- a. Foot or mounted elements infiltrating enemy units or areas.
- b. Helicopter transport.
- c. Elements left behind deliberately.

### 373. Employment Behind Enemy Lines

a. The armored cavalry platoon may be employed in reconnaissance operations behind enemy lines as a unit or by sections, squads, or small groups. A group of not less than three soldiers provides for continuous operations and security over a period of several days. Scouts are normally employed in the conduct of this type of mission, although other elements of the platoon may participate in platoon operations.

b. In most operations behind enemy lines, stealth and secrecy play an important role; consequently, vehicles may be of little or no value. Roads and populated areas should be avoided; trails and cross-country movement provide a degree of secrecy. Elements should move frequently to avoid detection by enemy radio detection devices and patrols. Such moves should be made during darkness and other periods of limited visibility.

c. Communication must be maintained so that timely reports can be transmitted to higher headquarters. Transmissions should be held to the minimum consistent with the mission. This will reduce chances of detection and the number of moves required. If organic radio equipment does not have sufficient range, special radio equipment or air relay stations must be used. The decision to employ vehicles on missions behind enemy lines will be influenced by the anticipated need for vehicular radios and mobility.

d. Operations of this type must be performed rapidly and efficiently. Following accomplishment of the mission, plans must be made for the immediate evacuation of the area.

e. Observation posts are normally established during daylight to observe the area designated. When required, patrols are used to supplement observation posts. At night, listening posts replace observation posts. Local security must be continual.

f. In a retrograde movement, when the bulk of the friendly forces have withdrawn from an area, selected armored cavalry elements may be deliberately left behind to gather information about the advancing enemy. The decision to deliberately leave small forces behind is normally made at division level or higher.

Units temporarily isolated by enemy action may perform the same function as forces deliberately left behind.

### 374. Factors Affecting Employment

The factors that affect the employment of armored cavalry elements operating behind enemy lines are generally the same as for other types of operations: the mission, enemy situation, terrain and weather, and troops available (METT). Important factors to consider within the framework of these factors include:

- a. *Time*. The time available to accomplish the assigned mission.
- b. *Distance*. The distance from the elements operating in the rear of enemy lines to friendly lines.
- c. *Movement*. The means employed to get forces into the area and to evacuate them from the area.
- d. *Communication*. The requirement for reliable communication equipment with sufficient range.
- e. *Attitude of Civilian Population*. A friendly civilian population in the area will normally make the task less difficult than will a hostile population.
- f. *Logistical Support*. The requirements for food, ammunition, and special equipment.

### 375. Planning for Operations Behind Enemy Lines

a. Operations behind enemy lines normally consist of three phases:

- (1) Getting forces to the area.
- (2) Operations in the area.
- (3) Evacuation of forces from the area.

b. The plan for a mission must include the specific tasks to be accomplished, the method to be used in getting to the area (not necessary if the unit is already in the area), cover operations (deception), time allotted to accomplish the mission, communication arrangements, and plans for evacuating the unit from the area. Of the above, the requirement for establishing and maintaining communication is the primary consideration.

c. Plans for the use of helicopters must provide for enough to transport troops and equipment, a suitable loading area, a suitable landing (unloading) zone in the area of operations, and helicopter routes that offer maximum concealment from enemy observation.

d. Detailed plans must be made for the recovery of elements operating behind enemy lines. If air recovery is planned, radio or

visual signals may be used to contact helicopters; a landing site that facilitates landing, loading, and security must be selected; and personnel and equipment must be ready for rapid loading and departure.

*e.* In operations in which helicopters are used to transport troops into the enemy rear area, the helicopters may be concealed and held in the area; their immediate availability will facilitate rapid evacuation. Plans must be made for adequate security of these helicopters.

*f.* The squadron and troop SOP's should contain guidance for elements conducting reconnaissance operations behind enemy lines. They should establish procedures for loading aircraft, getting behind enemy lines, avoiding detection, maintaining communication, reporting, and accomplishing recovery.

## Section V. AIRMOBILE OPERATIONS

### 376. General

*a.* Elements of the armored cavalry squadron may, in accomplishing any assigned mission, be transported by helicopters to the area of operations (FM 1-5 and FM 1-100). Armored cavalry personnel must be well trained in terminal guidance procedures. Particularly well suited for transport by helicopter are the scout sections and rifle squads of the armored cavalry platoons. Additionally, the vehicles organic to the scout sections may be transported by helicopter to the area of operations. This enhances the ability of the scout sections, once landed in an area, to accomplish assigned missions.

*b.* In airmobile operations, helicopters provide not only transportation to armored cavalry units, but can provide suppressive fires while en route to and in the landing area. Operation plans must include actions to be taken by air landed personnel once on the ground. The conduct of the ground phase of airmobile operations by armored cavalry units parallels that previously discussed in this manual.

*c.* For additional information on airmobile operations, see FM 17-1.

## CHAPTER 24

### COMMUNICATION SYSTEMS, ARMORED CAVALRY UNITS

---

#### 377. General

a. Radio is the primary means of communication within armored cavalry units. It provides commanders with the best means of communication for command of their units, control of fire support, and contact with higher headquarters.

b. This chapter covers the communication systems of armored cavalry troops in the armored division, infantry division, and armored cavalry regiment, and of the armored cavalry squadrons of the armored division and infantry division. Covered also are the communication systems of the scout platoon organic to armor battalions and armored infantry battalions and the scout section of the combat command headquarters and headquarters company.

c. Definitions, descriptions, and details of signal communication pertaining to armored cavalry units are contained in FM 7-24 for infantry division units and in FM 17-70 for armored division units.

#### 378. Command Post Radio Communication, Armored Cavalry Squadron

a. The squadron headquarters operations, intelligence, air request, and logistical armored personnel carriers normally are located in the squadron command post area. These vehicles are equipped with medium-power AM, radio teletypewriter (RATT), and FM radio facilities to provide the squadron staff sections with the radio equipment required to perform their duties.

b. To assist the operations section in planning, coordinating, and recording squadron combat operations, the radios in the operation and intelligence armored personnel carriers are operated in the following nets:

- (1) *Squadron command net FM.* The FM radio in the operations armored personnel carrier is the net control station of the squadron command net FM. This net links the squadron commander, fire support representatives, the staff, Army aviation, and the troop commanders. The



squadron commander uses this net to command and control the troops and attached units.

- (2) *Squadron command net AM.* The AM radio in the operations armored personnel carrier is the net control station for the squadron command net AM. This net provides a long range communication link between the squadron command post and the troop command posts. It is particularly well suited for transmitting detailed messages.
- (3) *Division intelligence net RATT.* The radio teletypewriter facility in the intelligence armored personnel carrier is operated in the division intelligence net RATT. This net is used by the intelligence officer (S2) for reporting to, and receiving intelligence information from, the division G2.
- (4) *Division command net FM.* The FM radio in the operations armored personnel carrier operates also in the division command net FM. This net provides an FM communication link between the squadron command post and division headquarters.

c. The squadron S3 air is provided with an armored personnel carrier containing a medium-power AM set to communicate with the division fire support coordination center. This radio is used primarily to transmit air request traffic on the division air request net AM. This vehicle is equipped also with a UHF air-to-ground radio and a vehicular FM radio. These two types of radio sets may be operated in conjunction with each other, utilizing retransmission. The retransmission facility permits a forward air controller, when working with the squadron, to communicate with tactical aircraft over any medium-power FM radio in the squadron and permits the S3 air to monitor the tactical air direction net UHF. This vehicle also contains an AM receiver to monitor the division warning broadcast net AM.

d. The squadron adjutant (S1) and logistics officer (S4) share an armored personnel carrier. The radio equipment mounted in this carrier is operated in the following nets:

- (1) *Squadron logistical net FM.* The FM radio in the squadron S1-S4 armored personnel carrier is the net control station for the squadron logistical net. This net provides the squadron logistics officer with voice radio communication to the support platoon leader. The armored cavalry troops and attached and supporting units operate in this net, as required, to transmit logistical and administrative traffic.

- (2) *Squadron command net FM*. A station is maintained in the squadron command net FM.
- (3) *Division logistical net RATT*. This net gives the squadron S4 a long range link to the division G4 and supporting technical services. It is used primarily to conduct logistical and administrative traffic.

e. The armored personnel carrier in the communication platoon is equipped with a medium-power AM (voice, CW, and RATT) radio for operation in the division command net RATT. This equipment gives the squadron commander a long range RATT link with the division command post. This vehicle also contains FM radio equipment that may be operated in the squadron and division command nets FM.

f. Since the command and control communication facilities for the squadron, and the subordinate radio facilities operating in division nets, are located in the command post area, it is essential that the command post be suitably located for good radio communication.

### 379. Command Group Radio Communication, Armored Cavalry Squadron

a. The squadron commander and operations officer are equipped with vehicular-mounted, medium-power FM radio equipment that permits them to operate in squadron and division command nets FM.

b. When the artillery liaison officer reports to the squadron for an operation he will bring vehicular mounted, medium-power FM radio equipment with which to operate in the squadron command net and in supporting artillery radio nets. He operates in the squadron command net to coordinate artillery fires with squadron operations, and in artillery radio nets to determine the availability of supporting fires, to request fires, and to coordinate the activities of the forward observers.

c. When operating with the squadron, the forward air controller is furnished with a tank-mounted, medium-power FM radio set for operation in the squadron nets. He is equipped also with a UHF air-to-ground set for communication in the tactical air direction net UHF. The forward air controller coordinates tactical air support with the squadron operations section over the squadron command net FM. He directs air strikes over the tactical air direction net UHF.

d. The Army aviation combat support section leader or a designated aviator will bring vehicular-mounted FM and AM radio equipment to operate in the squadron command net and division

air warning net. He coordinates Army aviation support with the squadron operations section over the squadron command net FM and coordinates aircraft operations with the division aviation company operations over the aviation company command nets.

### 380. Squadron Radio Net Diagrams

Figures 60 and 61, located in back of manual, show the authorized radio nets and type net diagrams for the armored division cavalry squadron and the infantry division cavalry squadron.

### 381. Squadron Wire Communication System

The squadron wire system is installed and operated by the squadron communication platoon. This system is installed whenever time and the situation will permit. It is normally used during periods of radio or listening silence, in defensive or stabilized operations, and in assembly areas. Wire lines are installed to each of the organic troops and attached units. To increase flexibility, lateral wire lines are installed to adjacent units whenever possible. Local wire lines are installed to the commander and to staff sections as required. Wire lines from supporting units are integrated into the squadron wire system. The division signal battalion is responsible for installing wire between the division and the squadron whenever feasible. Figure 62 shows a type wire net diagram for the armored division cavalry squadron and infantry division cavalry squadron.

### 382. Armored Cavalry Troop Communication System, General

#### *a. Command Post.*

- (1) The troop commander normally controls his unit from the troop headquarters section tank or from his 1/4-ton truck.
- (2) The armored personnel carrier in troop headquarters serves as the troop command post vehicle.

*b. Communication Personnel.* Troop communication personnel consist of a communication chief, two radio mechanics, and two intermediate speed radio operators.

### 383. Radio Nets, Armored Cavalry Troop

*a. Troop Command Net.* The commander of an armored cavalry troop controls his unit over the troop command net FM. The troop commander, executive officer, platoon leaders and platoon sergeants, maintenance section, liaison sergeant, troop command post vehicle, and headquarters tank operate in this net.

*b. Platoon Command Net.* Each armored cavalry platoon has its own platoon command net FM. Each section and squad of the platoon operates in this net.

*c. Squadron Command and Logistical Nets.* The troop commander operates in the squadron command net FM. The troop command post vehicle also operates in this net and, in addition, in the squadron command net AM. The troop executive officer also operates in the squadron logistical net FM.

*d. Nets Used by Artillery Forward Observers.* When an artillery forward observer operates with the armored cavalry troop, he communicates directly with his parent artillery unit fire direction center, using available communication equipment.

*e. Type Troop Nets.* See figures 63 and 64 for type troop radio nets.

### **384. Wire Nets, Armored Cavalry Troop**

Because of rapid and frequent moves by the armored cavalry troop during combat operations, wire is seldom used. However, in assembly and rear areas and in defensive operations, wire can be used to an advantage. When used, the troop wire net is installed, maintained, and operated by the troop communication personnel. Normally, the switchboard is installed in the troop command post vehicle. One line is laid to each platoon. The switchboard is connected with the squadron wire net on lines laid by squadron communication personnel. Figure 62 depicts a type troop wire net and indicates the equipment used by the armored cavalry troop.

### **385. Scout Platoon Radio Net**

The scout platoon organic to the headquarters and headquarters troop of the armor battalion and armored infantry battalion operates its own platoon command net FM. The platoon leader, platoon sergeant, and each section and squad leader operate in this net. In addition, the platoon leader and platoon sergeant operate in the battalion command net FM (figs. 65 and 66). For additional information, see FM 17-20 and FM 17-33.

### **386. Scout Section, Combat Command Headquarters and Headquarters Company, Radio Net**

The scout section of the combat command headquarters and headquarters company operates in the combat command logistical net FM. The section leader and each squad leader operate in this net.

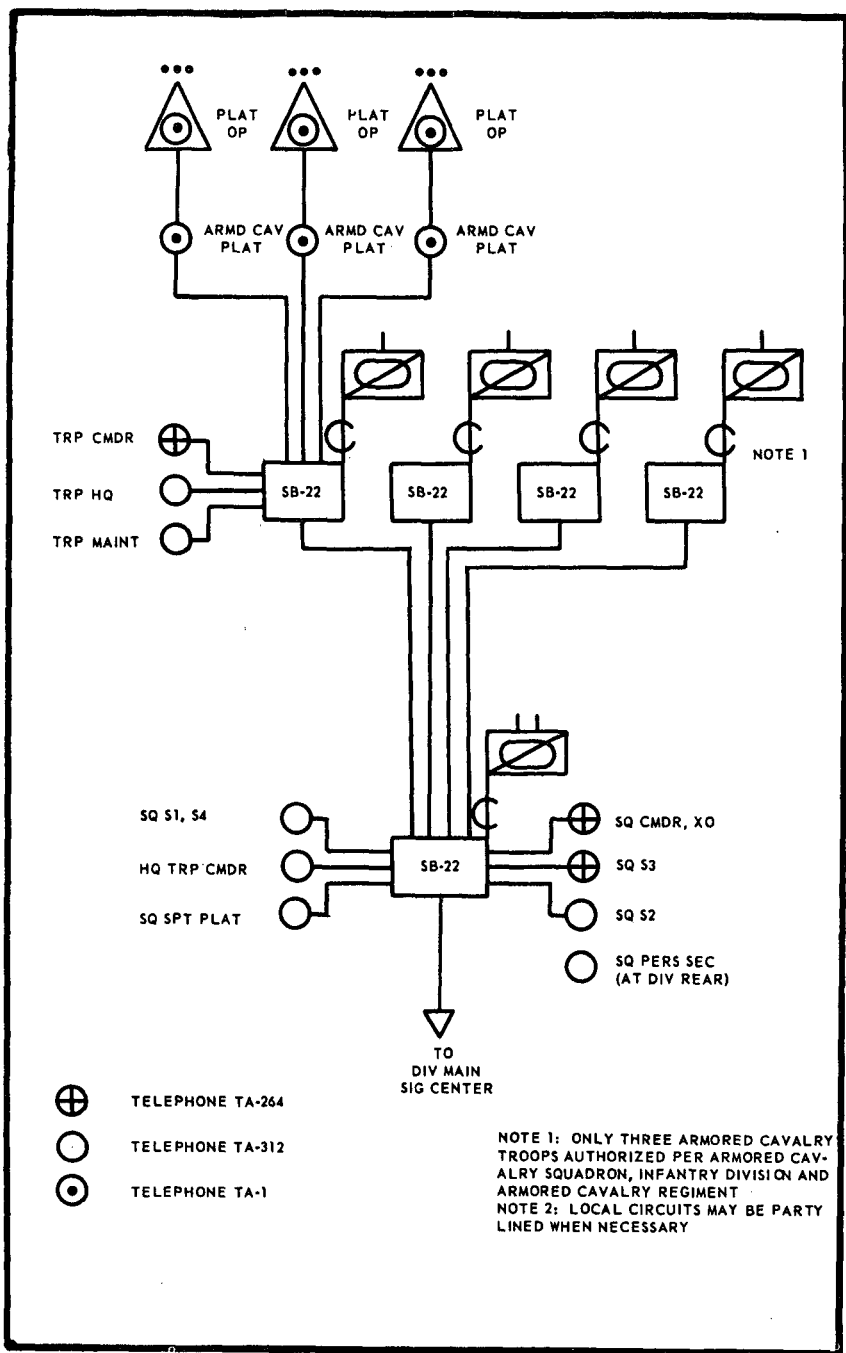


Figure 62. Type wire net diagram, armored division cavalry squadron, infantry division cavalry squadron, and armored cavalry troops.

## 387. Employment of Messengers

Mounted messengers are used by the squadron headquarters to provide special and scheduled messenger service to all subordinate and attached elements of the squadron. The mounted messengers normally are controlled by the message center except during marches, when they may be decentralized to the squadron staff sections. Mounted messengers are a fast, reliable means of transporting bulky documents over short distances. Division headquarters will normally operate a messenger service to the squadron.

## 388. Supplementary Means of Communication

Sound and visual communication are used to the maximum. Identification panels are used to identify vehicles and ground positions to friendly aircraft. Prearranged meanings are assigned in

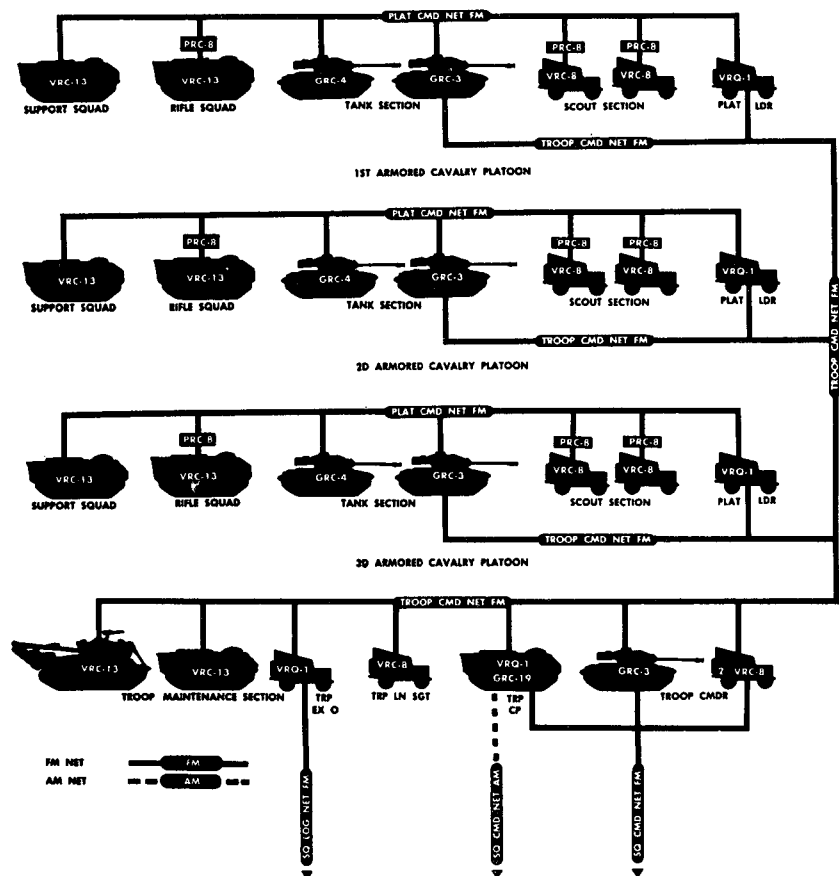


Figure 63. Type radio net diagram, armored cavalry troop, armored division cavalry squadron and armored cavalry regiment.

the SOI extract to pyrotechnic, light, flag, and sound signals. Generally, these are used to direct movement of small elements and for identification. Visual signals should, whenever possible, be screened from enemy observation to keep from alerting the enemy to impending action. Sound signals are used primarily to give an alarm, attract attention, and transmit short messages of pre-arranged meaning.

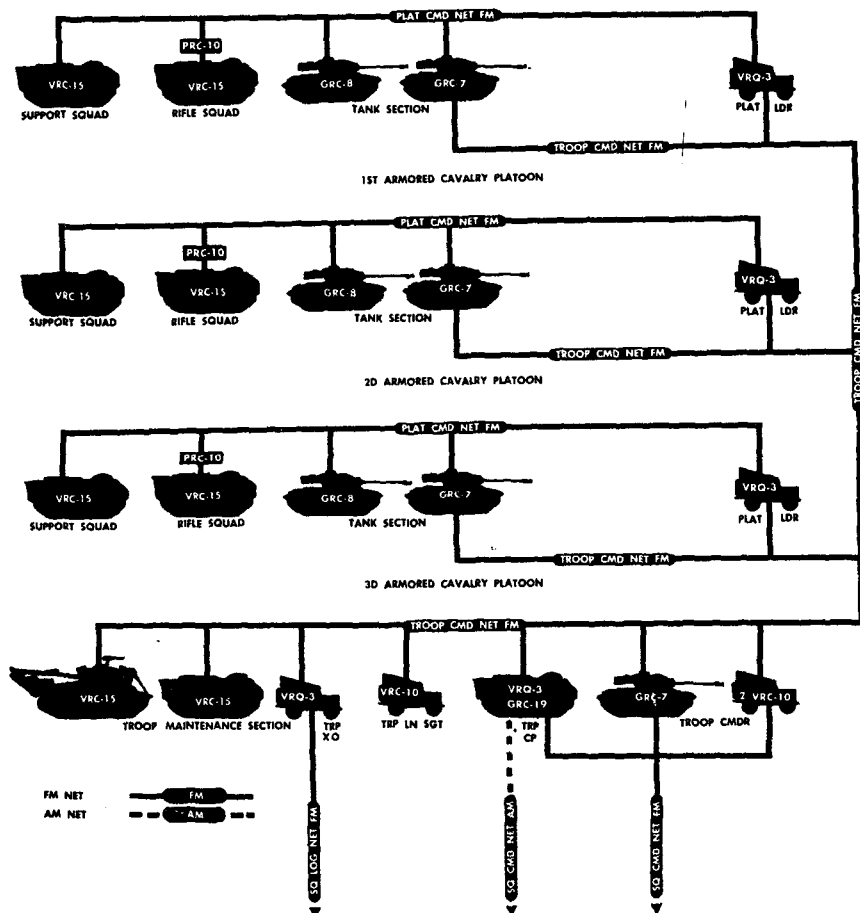


Figure 64. Type radio net diagram, armored cavalry troop, infantry division cavalry squadron.

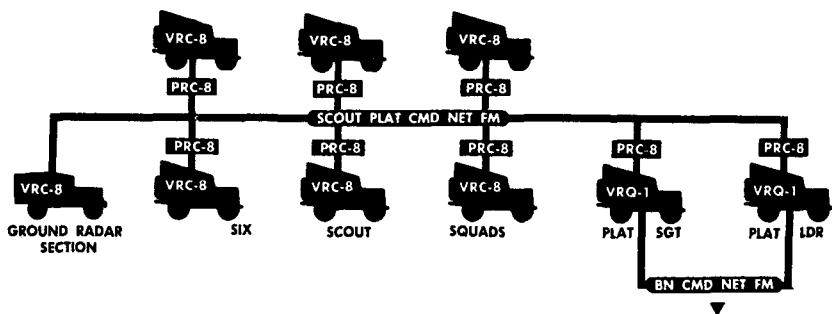


Figure 65. Type radio net diagram, scout platoon, armor and armored infantry battalions, armored division.

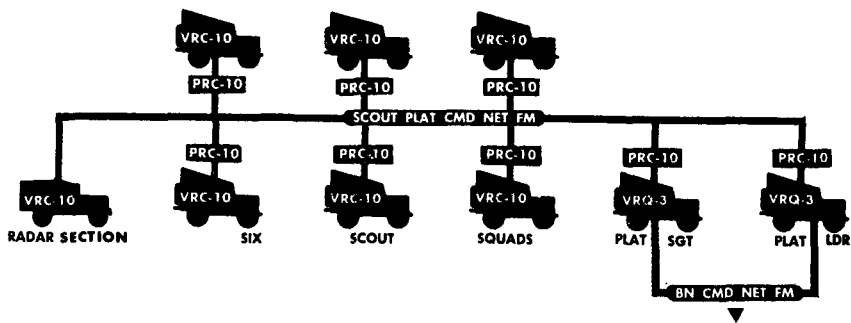


Figure 66. Type radio net diagram, scout platoon, infantry division armor battalion and nondivisional armor battalion.



## APPENDIX I

### REFERENCES

---

#### 1. Field Manuals

FM 1-5	Army Aviation Organization and Employment.
FM 1-100	Army Aviation.
FM 3-5	Tactics and Techniques of Chemical, Biological, and Radiological Warfare.
FM 5-15	Field Fortifications.
FM 5-20	Camouflage, Basic Principles and Field Camouflage.
FM 5-25	Explosives and Demolitions.
FM 5-34	Engineer Field Data.
FM 5-36	Route Reconnaissance and Classification.
FM 6-20	Field Artillery Tactics and Techniques.
FM 6-40	Field Artillery Gunnery.
FM 6-50	4.2-Inch Mortar, M30.
FM 6-135	Adjustment of Artillery Fire by the Combat Soldier.
FM 7-10	Rifle Company, Infantry and Airborne Division Battle Groups.
FM 7-24	Communication in Infantry and Airborne Divisions.
FM 7-40	Infantry and Airborne Division Battle Group.
FM 7-100	Infantry Division.
FM 17-1	Armor Operations, Small Units.
FM 17-20	Armored Infantry Units—Platoon, Company, and Battalion.
FM 17-33	Tank Units—Platoon, Company, and Battalion.
FM 17-50	Armor Logistics.
FM 17-70	Signal Communication in the Armored Division.
FM 17-80	Tanks, 76-mm Gun, M41 and M41A1.
FM 17-95	The Armored Cavalry Regiment and Armored Cavalry Reconnaissance Battalion.
FM 17-100	The Armored Division and Combat Command.
FM 20-32	Land Mine Warfare.
FM 20-60	Battlefield Illumination.
FM 21-5	Military Training.
FM 21-6	Techniques of Military Instruction.
FM 21-10	Military Sanitation.
FM 21-11	First Aid for Soldiers.

FM 21-26 Map Reading.  
 FM 21-30 Military Symbols.  
 FM 21-40 Small Unit Procedures in Atomic, Biological, and Chemical Warfare.  
 FM 21-41 Soldiers Handbook for Nuclear, Biological, and Chemical Warfare.  
 FM 21-60 Visual Signals.  
 FM 21-75 Combat Training of the Individual Soldier and Patrolling.  
 FM 21-76 Survival.  
 FM 21-77 Evasion and Escape.  
 FM 22-100 Military Leadership.  
 FM 23-5 US Rifle, Caliber .30, M1.  
 FM 23-25 Bayonet.  
 FM 23-50 Grenades and Pyrotechnics.  
 FM 23-32 3.5-Inch Rocket Launcher.  
 FM 23-55 Browning Machine Guns, Caliber .30, M1917A1, M1919A4, M1919A4E1, M1919A6, and M37.  
 FM 23-65 Browning Machine Gun, Caliber .50, HB, M2.  
 FM 23-92 4.2-Inch Mortar, M2.  
 (C) FM 24-150 Electronic Warfare (U).  
 FM 27-10 The Law of Land Warfare.  
 FM 30-5 Combat Intelligence.  
 FM 30-7 Combat Intelligence—Battle Group, Combat Command, and Smaller Units.  
 FM 31-10 Barrier and Aerial Operations.  
 FM 31-15 Operations Against Airborne Attack Guerilla Action and Infiltration.  
 FM 31-25 Desert Operations.  
 FM 31-50 Combat in Fortified Areas and Towns.  
 FM 31-70 Basic Cold Weather Manual.  
 FM 31-71 Northern Operations.  
 FM 31-72 Mountain Operations.  
 FM 57-35 Army Transport Aviation, Combat Operations.  
 FM 72-20 Jungle Operations.  
 FM 100-5 Field Service Regulations—Operations.  
 FM 101-5 Staff Officers' Field Manual—Staff Organization and Procedure.  
 (S-RD) FM Staff Officers' Field Manual—Nuclear Weapons Employment (U).

## 2. Technical Manuals

TM 3-200 Capabilities and Employment of Toxic Chemicals.  
 TM 57-210 Air Movement of Troops and Equipment.

### 3. Regulations

- AR 220-60 Battalions, Battle Groups, Squadrons—General Provisions.
- AR 220-70 Companies—General Provisions.
- AR 320-5 Dictionary of United States Army Terms.
- AR 320-50 Authorized Abbreviations and Brevity Code.
- AR 600-66 Reports of Casualties Originating in Combat Areas.

### 4. Miscellaneous

- DA Pam 39-1 Nuclear Weapons Employment.
- DA Pam 108-1 Index of Army Motion Pictures, Filmstrips, Slides, and Phono-Recordings.
- DA Pam 310- series Military Publications (Indexes).
- DATC 20-1 Airmobile Operations.
- DATC 101-1 Prediction of Fallout and Radiological Monitoring and Survey.

## APPENDIX II

### COMMANDER'S CHECKLISTS

---

(The following checklists for armored cavalry unit commanders should be used as a guide only. Portions that do not apply should be disregarded. Detailed coverage of the material appearing in the checklist is presented in the manual. Additional checklists for commanders are contained in FM 17-1.)

## PLANNING CHECKLIST

1. What is my mission?
2. What forces are available to me to accomplish it? What are their capabilities, and how can I use these capabilities to the best advantage?
3. How much time is available to me and my subordinates for reconnaissance, planning, and the issuance of orders?
4. What supporting units are available to me? How can I best use this support?
5. How will the terrain affect my planning? The enemy situation? The weather?
6. What control measures will I employ during the mission? Boundaries? Phase lines? Routes or axes of advance? Contact points?
7. Have I assigned clear, concise tasks to subordinate units? Do they facilitate accomplishment of the mission?
8. Are the tasks assigned to subordinate units within their capability?
9. Have I coordinated the efforts of my unit with adjacent or other affected units?
10. Does my plan permit freedom of action on the part of subordinates?
11. Is my plan based on the most accurate information of the terrain and enemy available at this time?
12. Can my plan be logistically supported?
13. Have I considered time and space factors in the execution of the mission?
14. Does my plan include provisions for the next step in the operation?
15. Have I included provisions for all-round security?
16. Have I made maximum use of my forward air controller, artillery and engineer representatives, attached unit commanders, and staff in planning, checking, and completing the details of my plan?
17. Have arrangements been made for reporting information of the enemy or terrain?
18. Is my communication adequate to support this plan?

## OPERATIONAL CHECKLIST

### 1. PREPARATION FOR A MARCH

- a.* Issue warning order as soon as notified by higher headquarters.
- b.* Inspect maintenance, supply, and general readiness for combat.
- c.* Study available maps and make a personal reconnaissance.
- d.* Orient staff and subordinates.
- e.* Receive march order from higher headquarters.
- f.* Issue march order.
- g.* Establish liaison with preceding unit in the march column.
- h.* Inspect police of area.
- i.* Report to higher headquarters when unit is ready to move out.
- j.* Move out in order to cross start point (SP) at time designated in higher headquarters march order.

### 2. ON THE MARCH

- a.* Move near the head of column or in a position that facilitates control.
- b.* Render all required reports (crossing phase lines, check points, start points, release points, etc.).
- c.* Check unit at irregular intervals for march discipline and march efficiency.
- d.* Ensure that unit follows designated route.
- e.* At halt, check unit.
  - (1) Coordinate local security.
  - (2) Receive status reports from subordinate commanders and report unit status to higher commanders.
  - (3) Report unit's readiness to resume march.
- f.* At halts for mess, make sure all personnel are fed.
- g.* At unscheduled halts, check as far forward as head of preceding unit for cause. Take any necessary corrective action.
- h.* Keep radio receiver on command channel of higher headquarters. Be alert for warnings of attack.
- i.* If warning is received, alert unit.

### 3. OCCUPATION OF ASSEMBLY AREA

- a.* Contact guide at release point.

- b.* Get unit off road immediately.
- c.* Set up command post.
- d.* Check on unit area. Make necessary adjustments between subordinate elements.
- e.* Receive reports of subordinate units, consolidate them, and report to higher headquarters by radio or liaison agent.
- f.* Observe subordinate units for:
  - (1) Movement into area.
  - (2) Organization of area.
  - (3) Establishment of security.
- g.* Coordinate local security and contact adjacent units.
- h.* Set up traffic control plan; check camouflage.
- i.* Check resupply and vehicular maintenance.
- j.* Check set up of trains area.
- k.* Inspect the entire area; order necessary improvements of routes and entrances.
- l.* Give instructions for action in event of attack.
- m.* Report to higher commander with disposition overlay or sketch.
- n.* Supervise improvement of area. Check communication.

#### 4. IN ASSEMBLY AREA. PREPARATION FOR A MISSION

- a.* Check readiness of unit for combat.
- b.* Issue warning order when notified by higher headquarters.
- c.* Receive higher commander's order.
- d.* Direct subordinate commanders and staff to assemble at a prearranged place to receive order.
- e.* Make a detailed map study of area; begin estimate of situation; coordinate with other units; make a tentative plan; make a personal reconnaissance (air and/or ground); complete the plan.
- f.* Meet subordinate commanders and staff and issue order.
- g.* Supervise final preparations for the mission.
- h.* Notify higher commander when ready.

#### 5. ATTACK

- a.* Deploy unit for necessary security.
- b.* Obtain information of enemy immediately available.
- c.* Make personal reconnaissance if time permits.
- d.* Make estimate of situation; decide on plan of attack.
- e.* Issue attack order from vantage point overlooking area of operations.
- f.* Check provisions for coordination.

*g.* Accompany the maneuvering force or occupy a position assuring maximum control of all elements.

*h.* Maintain communication with all elements.

*i.* Upon reaching the objective, begin consolidation of the position and reorganization of the unit.

*j.* Keep the higher commander informed of developments in the situation.

*k.* Issue necessary instructions for continuing the mission.

## 6. DEFENSE

*a.* Obtain location of defensive position from higher headquarters or make a map and terrain study to select best position for the defense.

*b.* Reconnoiter the area ; make estimate of the situation ; develop plan of defense.

*c.* Assemble subordinate commanders and staff ; issue orders.

*d.* Supervise preparations of the position for defense.

*e.* Inspect position for organization and effectiveness.

*f.* Make provision for local security.

*g.* Ensure proper fire control and distribution.

*h.* Arrange for fire support.

*i.* Prepare fire plan ; coordinate with artillery representative.

*j.* Occupy position from which to control action of subordinate units.

*k.* Maintain communication with all elements.

*l.* Maintain contact and liaison with adjacent units.

*m.* Keep higher commander informed of developments in the situation.

## 7. DELAYING ACTION

*a.* Based on estimate of the situation ; decide on plan of delay.

*b.* Study maps, make personal reconnaissance, select locations for delaying positions.

*c.* Dispatch executive officers to reconnoiter, prepare, and organize the next delaying position.

*d.* Issue orders to subordinate commanders.

*e.* Supervise organization of the delaying positions as a defensive position.

*f.* Post security.

*g.* Create and improve obstacles to impede enemy advance.

*h.* Ensure that the fire support plan provides for maximum volume and dispersion of fire.



- i.* Keep informed of the progress in preparation of the next delaying position.
- j.* Maintain communication with all elements.
- k.* Control the fires of all elements.
- l.* Direct the withdrawal of elements from the delaying position; accompany the last elements to withdraw.
- m.* Upon arrival at the next delaying position, check organization of the position, make necessary adjustments, and repeat the same procedure followed at the initial delaying position.
- n.* Keep higher headquarters continuously informed of the situation.

## 8. RECONNAISSANCE

- a.* Obtain mission, including what, where, and when.
- b.* Make detailed study of maps covering area of operations.
- c.* Make estimate of situation; formulate plan.
- d.* Assemble subordinates; issue order.
- e.* Receive subordinate unit reports on readiness to move.
- f.* Keep command group centrally located in unit formation.
- g.* Personally move to most critical point in area of operations, if the situation warrants.
- h.* Keep continuously informed of developments in the situation.
- i.* Make rapid decisions based on a continuous estimate of the situation.
- j.* Maintain the flow of information to higher headquarters.

## 9. FLANK GUARD

- a.* Study map of area involved for likely avenues of enemy approach, key points of observation, good routes, alternate routes, and distances.
- b.* Obtain schedule of march for main body. Plan movement to cover it. Issue orders.
- c.* Plan for security of flank guard itself.
- d.* In rolling or rough terrain, occupy commanding terrain. In open terrain, march parallel to main body.
- e.* Keep higher commander informed of the situation.
- f.* Delay large hostile forces; destroy or drive off smaller ones.

## 10. COVERING FORCE (OFFENSE)

- a.* Study map and terrain for likely enemy positions, routes of advance, possible natural obstacles, key terrain features.
- b.* Obtain from higher headquarters: axis of advance, frontage, phase lines, adjacent units, available supporting fires, action de-

sired of covering force on encountering strong enemy forces and on completion of mission.

c. Issue orders based on this information; assign sectors of responsibility.

d. Perform reconnaissance until enemy is contacted.

e. Guard main body from surprise by enemy. Seize key terrain features; destroy small enemy forces by fire and maneuver; develop larger forces.

f. Report at phase lines or on enemy contact.

g. Observe continuously while moving or at a halt.

h. Maintain contact and liaison with adjacent units.

**APPENDIX III**  
**EXAMPLES OF OPERATION ORDERS**

## EXAMPLE NO. 1. ARMORED CAVALRY PLATOON OPERATION ORDER—ATTACK (ORAL)

*Note.* The following order of the 1st Platoon Leader, Troop A, is issued to the section and squad leaders. Time permitting, it should be issued from a vantage point overlooking the attack area. Paragraph numbers are usually omitted when the order is issued orally. The platoon leader will refer to the terrain as he issues his order.

### 1. SITUATION.

*a. Enemy forces.* The enemy holds the high ground to our front (points to it). There is an antitank gun in that clump of trees to the right of the road, 200 yards beyond that creek. There is a machinegun in that patch of brush to the right of the antitank gun. There are a few riflemen to the left of the road along that bridge.

*b. Friendly forces.* There are no friendly troops in our immediate vicinity.

*c. Attachments and detachments.* None.

### 2. MISSION.

The platoon will attack that hill on my order.

### 3. EXECUTION.

*a. Concept of operation.* This attack will envelop the left flank of the enemy position with tanks leading, followed by the rifle squad. The base of fire will be provided by the support squad and the first scout squad.

*b. Scout section.* First scout squad remain here with base of fire. Second scout squad provide flank security for maneuvering force.

*c. Tank section.* Attack left flank of enemy position.

*d. Rifle squad.* Follow tank section and be prepared to dismount on order.

*e. Support squad.* Remain in present position and form base of fire. Initially, fire on antitank gun; shift fires on my order. Be prepared to displace forward.

*f. Coordinating instructions.* Line of departure is that road.

### 4. ADMINISTRATION AND LOGISTICS.

The aidman will be with the rifle squad.

## 5. COMMAND AND SIGNAL.

### *a. Signal.*

(1) Platoon frequency is 27.2.

(2) Emergency signal to lift supporting fires is a red star cluster.

*b. Command.* I will be in my tank. Platoon sergeant, take my ¼-ton and remain with base of fire.

Are there any questions? Time is now 1635.

## EXAMPLE NO. 2. ARMORED CAVALRY TROOP OPERATION ORDER—RETROGRADE (ORAL)

*Note.* The following order of the Troop Commander, Troop B, is issued to all subordinate leaders, including the artillery forward observer. Time permitting, it should be issued from a vantage point overlooking the troop sector. Paragraph numbers and letters are usually omitted when the order is issued orally. The troop commander refers to the terrain as he issues the order.

### 1. SITUATION.

*a. Enemy forces.* Elements of the 201st Fusilier Mechanized Rifle Regiment, 4th Fusilier Mechanized Division, oppose us. They currently occupy that ridge (point).

*b. Friendly forces.* 1st Battle Group, 1st Infantry, withdraws at 2100 hours tonight to a new defensive position west of the STREU River. 1st Reconnaissance Squadron, 31st Cavalry, covers the withdrawal of the 1st Battle Group, 1st Infantry, employing Troops A and B abreast, Troop A on the north (left). Troop C will be the squadron security force initially and will occupy positions presently held by the 1st Battle Group, 1st Infantry, then, upon withdrawal through first delaying position, will revert to squadron reserve. 1st Howitzer Battalion, 111th Artillery, is in direct support of the squadron. This shows planned fires (points to squadron fire support plan overlay). Elements of Ninth Tactical Air Force support this operation.

*c. Attachments and detachments.* None.

### 2. MISSION.

This troop organizes initial delaying positions along this ridge (points) by 2000 hours tonight; covers the withdrawal of Companies B and C, 1st Battle Group, 1st Infantry; then conducts delaying action in zone.

### 3. EXECUTION.

*a. Concept of operation.* This operation will be in two phases: first, to organize and occupy initial delaying positions to cover withdrawal of Companies B and C, 1st Battle Group, 1st Infantry; then to conduct delaying action in zone. Fire support is provided by 1/111 Artillery.

*b. 1st Platoon.* Organize position there (points).

*c. 2nd Platoon.* Organize position here (points).

- d. *3d Platoon.* Organize position there (points).
  - (1) Platoons coordinate fires here (points to map).
  - (2) Withdraw to successive positions on my order.
  - (3) Reconnoiter to the next troop delaying position here (points to map); select intermediate platoon delaying positions and report locations to me.

#### 4. ADMINISTRATION AND LOGISTICS.

- a. *Vehicle collecting point.* Vicinity 845096.
- b. *Axis of evacuation.* EICHA-MILZ.
- c. *Squadron aid station.* Vicinity 115774.

#### 5. COMMAND AND SIGNAL.

- a. *Signal.*
  - (1) Listening silence until lifted on order.
  - (2) SOI index 1-7 is in effect.
- b. *Command.* I will be with the second platoon initially.

Are there any questions? Time is now 1310.

EXAMPLE NO. 3. ARMORED CAVALRY SQUADRON OPERATION  
ORDER—RECONNAISSANCE (OVERLAY TYPE)  
(No change from oral orders)

Copy No. 3  
1st Recon Sq, 31st Cav  
046383, GERMANY  
102200 Oct 19----  
SG0201

OPORD 30

References: Map, GERMANY, 1:50,000, WALTERSHAUSEN and GOTH A sheets.

1. SITUATION.

*a. Enemy forces.*

- (1) Elements Aggressor 3d Rifle Div opposing 301st Armd Div.
- (2) Aggressor 35th Mecz Div vicinity ERFURT could reinforce 3d Rifle Div three hours after start of movement.

*b. Friendly forces.*

- (1) 301st Armd Div attacks 120400 October, with CCA and CCB abreast, to seize high ground northeast of GOTH A.
- (2) 203d Inf Div attacks in zone 120400 October.
- (3) 61st Armd Cav will conduct reconnaissance operations in zone of 201st Inf Div commencing 110400 October.
- (4) 301st Armd Div Arty provides fire support.
- (5) Ninth Tactical Air Force supports Twentieth US Army; priority to L Corps and 301st Armd Div.

*c. Attachments and detachments.* Cmbt Spt Sec and Aerial Survl Plat, 301st Avn Co attached.

2. MISSION. This squadron will reconnoiter in zone from phase line ORANGE to phase line BLUE, commencing 110400 October.

3. EXECUTION.

*a. Concept of operation.* This operation will be a reconnaissance in the zone of the 301st Armd Div with Troops A, B, and C abreast. Troops supported by Army aircraft will reconnoiter in assigned zones. Aerial survl plat will reconnoiter in zone forward of armd cav troops. Upon completion of reconnaissance, troops establish blocking position vicinity phase line BLUE. Fire support provided by 301st Armd Div Arty. Annex A—Fire Support Plan.

*b. Troop A.* Reconnoiter in zone. Establish blocking position upon reaching phase line BLUE.

*c. Troop B.* Reconnoiter in zone. Establish blocking position upon reaching phase line BLUE.

*d. Troop C.* Reconnoiter in Zone. Establish blocking position upon reaching phase line BLUE.

*e. Troop D.* Follow Troop C initially. Be prepared to take over mission of Troops A, B, or C.



*f. Aerial Survl Plat. 301st Avn Co.* Reconnoiter in squadron zone forward of phase line LEMON. Annex B—Aerial Surveillance Plan.

*g. Combat Support Section, 301st Avn Co.* Support each committed troop with one reconnaissance helicopter. Remainder of section under squadron control.

*h. Coordination instructions.*

- (1) Adjacent units will be contacted at designated contact points.
- (2) Report crossing phase lines.
- (3) All reports to be submitted by 112300.
- (4) EEI.
  - (a) Location, disposition, strength, and composition of enemy contacted.
  - (b) Routes in zone suitable for passage of medium-gun tanks.
  - (c) Condition of bridges, fords, and roads in zone.

#### 4. ADMINISTRATION AND LOGISTICS.

- a.* Squadron trains located initially at WE 5449.
- b.* Spt plat attachments to troops per SOP.
- c.* Class V supply point located at WI 4231.

#### 5. COMMAND AND SIGNAL.

*a. Signal.*

- (1) Index 1-5, SOI.
- (2) Listening silence until crossing phase line ORANGE.

*b. Command.* CP follow Troop B.

Acknowledge.

SPEED

Lt Col

Annexes: A—Fire Support Plan (Omitted)

B—Aerial Surveillance Plan (Omitted)

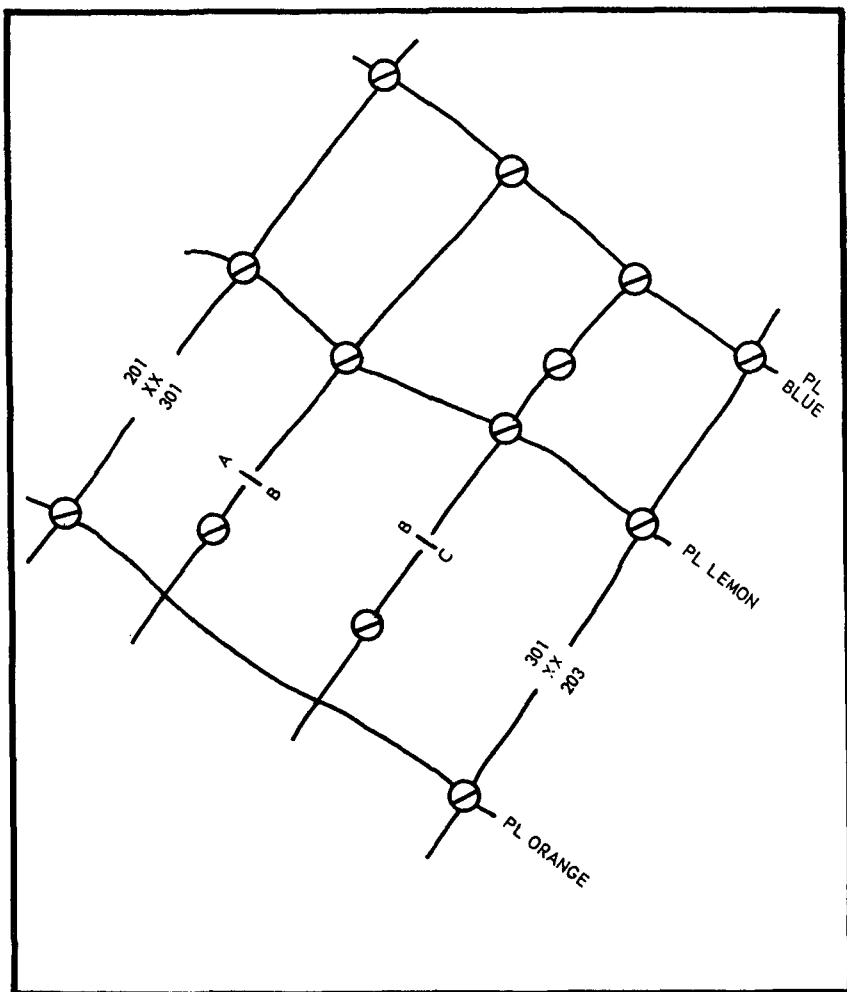
Distribution: F

OFFICIAL:

/s/Tuff

TUFF

S3



*Example No. 3. Armored cavalry squadron operation order—reconnaissance (overlay type).*

# INDEX

	Paragraphs	Page
Action on contact.....	34	26
Action at an obstacle.....	34	26
Advance guard:		
Armored cavalry platoon.....	99	62
Scout platoon.....	38	30
Squadron.....	281, 282	184
Troop.....	168-170	106-108
Aerial surveillance platoon.....	91, 214,	54, 143,
	249, 266,	167, 176,
	267, 269,	178, 179,
	314, 320,	200, 205,
	325, 343	207, 219
Air support, tactical.....	9, 158,	9, 94,
	258	171
Airborne attack. ( <i>See</i> Rear area security force.)		
Airmobile operations.....	59, 376	43, 234
Air landed attack. ( <i>See</i> Rear area security force.)		
Ambush in delaying action:		
Armored cavalry platoon.....	137	87
Squadron.....	352	222
Troop.....	221	150
Area reconnaissance:		
Armored cavalry platoon.....	94	58
Scout platoon.....	36	29
Squadron.....	271	180
Troop.....	166	102
Armored cavalry units:		
Characteristics.....	4	7
Employment.....	5-9	9
Missions.....	3	7
Support.....	9	9
Armored rifle squad.....	79, 89	51, 53
Army aircraft. ( <i>See</i> Army aviation.)		
Army aviation.....	9, 20, 91,	9, 14, 54,
	127, 158, 164,	79, 94, 99,
	176, 257,	113, 170,
	266, 267,	176, 178,
	269, 279,	179, 183,
	284, 288,	186, 188,
	290, 320,	189, 205,
	355	224
Artillery support. ( <i>See also</i> fire support.).....	9, 44, 110,	9, 36, 69,
	114, 158,	70, 94,
	254, 320,	169, 205,
	355	224

	Paragraphs	Page
Assembly area, checklist.....	App II, 3	249
Attack:		
Armored cavalry platoon.....	104-119	66-72
Checklist.....	App II, 5	250
From march column.....	119	72
Scout platoon.....	42-44	34-36
Squadron.....	295-317	192-201
Troop.....	184-204	124-134
Aviation company. (See Army aviation.)		
Base of fire:		
Armored cavalry platoon.....	109, 114	67, 70
Scout platoon.....	44	36
Squadron.....	300	195
Troop.....	191, 198	130, 132
Blocking positions.....	49, 126, 172	40, 77, 109
Bomb line.....	304	196
Characteristics of armored cavalry units.....	4	7
Chemical, biological, and radiological monitoring and survey.....	61, 97, 362-366	44, 62, 227-229
Combat operations, scout platoon.....	20	14
Combat outpost. (See Defense, position.)		
Combat support for armored cavalry units.....	9, 127, 138, 158, 225, 253- 258, 278, 285, 344, 355	9, 79, 94, 152, 169- 171, 183, 187, 219, 224
Command group radio communication.....	379	237
Command post:		
Radio communication.....	378	235
Squadron.....	261	171
Troop.....	159	96
Communication:		
Characteristics.....	4	7
Command group radio communication.....	379	237
Command post radio communication.....	378	235
Liaison.....	59	43
Messengers.....	387	241
Radio nets.....	383	238
Routes.....	103, 183, 291, 292	65, 120, 189
Scout platoon and section.....	27, 385, 387	23, 239, 241
Supplementary means.....	388	241
Wire system.....	384, 387	239, 241
Contact party.....	56	42
Control measures.....	106, 181, 304	66, 119, 196
Covering force:		
Checklist.....	App II, 10	252
Squadron.....	287, 288, 320	187, 205
Troop.....	178, 179	116

	Paragraphs	Page
Damage assessment.....	249	167
Damage control.....	60, 249, 367-369	44, 167, 229, 230
Daylight withdrawal. (See Withdrawal from action.)		
Defense:		
Armored cavalry platoon.....	120-127	73-79
Checklist.....	App II, 6	251
Mobile:		
Scout platoon.....	47	37
Squadron.....	232-235	159, 160
Troop.....	211	139
Position:		
Scout platoon.....	48	37
Squadron.....	336-339	212, 213
Troop.....	212	140
Scout platoon.....	45-49	36-40
Squadron.....	318-340	204-214
Troop.....	205-214	135-143
Delaying action:		
Armored cavalry platoon.....	128-138	81-87
Checklist.....	App II, 7	251
Scout platoon.....	51, 52	41
Squadron.....	344-355	219-224
Troop.....	215-225	146-152
Duties of personnel:		
Platoons and sections.....	16-19, 81-85, 115	13, 51, 52, 70
Troop headquarters.....	144-150	91-92
Employment:		
Armored cavalry platoon.....	86-90	52, 53
Armored cavalry units.....	5-9	9
Armored rifle squad.....	89	53
Fundamentals.....	7	9
Medium range ground radar.....	89	53
Scout platoon.....	20, 67	14, 47
Scout section.....	87	52
Short range ground radar.....	153-155	93
Squadron.....	249-265	167-175
Support squad.....	90, 110	53, 69
Tank section.....	88	53
Troop.....	151-155	92, 93
Engineer:		
Pioneer work:		
Armored rifle squads.....	89	53
Scout units.....	29	24
Route reconnaissance.....	92	54
Support:		
Armored cavalry units.....	9, 92, 127, 256	9, 54, 79, 170
Defense:		
Squadron.....	329	209
Troop.....	210	138

**Engineer—Continued****Support—Continued**

Delaying action, squadron-----	344	219
Squadron-----	256	170
Troop-----	158	94
Estimate of the situation-----	185, 187	124, 125
Exploitation-----	315, 316	200, 201
Factors of METT-----	8, 251, 346	9, 168, 220
Filling a gap-----	322	206
Fire:		
Reconnaissance-----	95	61
Support ( <i>see also</i> Base of fire):		
Armored cavalry units-----	9, 158, 254,	9, 94, 169,
	330	209
Plan-----	219, 330	148, 209
Scout platoon-----	44, 46	36, 37
Firepower:		
Armored cavalry units-----	4	7
Scout units-----	26	22
Fixing force. ( <i>See</i> Defense, mobile.)		
Flank guard:		
Armored cavalry platoon-----	100	63
Scout platoon-----	39	32
Squadron-----	283, 284,	185, 186,
	321	206
Troop-----	171-174	108-113
Formations:		
Armored cavalry platoon:		
Advance guard-----	99	62
Route reconnaissance-----	92	54
Attack-----	189	128
Scout platoon, advance to contact-----	21	14
Squadron, for reconnaissance-----	272	180
Troop:		
Advance guard-----	169	108
Area reconnaissance-----	166	102
Route reconnaissance-----	164	99
Zone reconnaissance-----	165	102
Forward observer-----	44, 158,	36, 94,
	168, 186	106, 125
General outpost. ( <i>See</i> Defense, position.)		
Ground radar section-----	14, 269,	11, 171,
	329, 335,	209, 210,
	343	219
Guerrilla attack. ( <i>See</i> Rear area security.)		
Guides, scout units-----	57	43
Headquarters. ( <i>See</i> type of unit.)		
Helicopters, use-----	204, 267,	134, 178,
	269, 284,	179, 186,
	336	212
Infantry. ( <i>See</i> Armored rifle squad.)		

	Paragraphs	Page
<b>Liaison:</b>		
Artillery.....	44	36
Scout units.....	54	42
Sergeant.....	148, 176	92, 113
Squadron security operations.....	280	184
Troop.....	160, 225	97, 152
Listening posts.....	25	22
Loading, airmobile operations.....	376	234
Logistics, squadron.....	263	174
Maintenance platoon, squadron.....	244	164
<b>Maneuvering force:</b>		
Armored cavalry platoon.....	108, 113	67, 69
Scout platoon.....	44	36
Squadron.....	298, 299, 310	193, 198
Troop.....	190, 197	128, 131
March, checklist.....	App II, 1, 2	249
Medium range ground radar section.....	14, 30,	11, 25,
	265	175
Messengers.....	387	241
METT, factors.....	8, 187,	9, 125,
	251, 374	168, 233
<b>Minefields. (See Engineer support.)</b>		
<b>Missions:</b>		
Armored cavalry platoon.....	74	49
Armored cavalry units.....	3	7
Ground radar.....	31	25
Preparation checklist.....	App II, 4	250
Reconnaissance:		
Armored cavalry platoon.....	91-97	54, 62
Behind enemy lines.....	371	231
Scout platoon.....	33-36	26-29
Scout section.....	69	43
Squadron.....	269-271	179-180
Troop.....	164-166	99-102
Scout platoon.....	11	10
Scout section.....	63	45
Security:		
Armored cavalry platoon.....	98	62
Scout platoon.....	37	30
Scout section.....	70	47
Squadron.....	278	183
Troop.....	167	106
Squadron.....	234	159
Troop.....	140	88
<b>Mobile defense. (See Defense.)</b>		
<b>Mobile flank guard. (See Flank guard.)</b>		
<b>Mortar units. (See Support squad*)</b>		
<b>Movement:</b>		
Bounds:		
Alternate.....	21, 22	14-16
Successive.....	21, 22	14-16
Contact.....	21	14

	Paragraphs	Page
Nets, radio.....	383	238
Night withdrawal. ( <i>See</i> Withdrawal from action.)		
Observation:		
Posts.....	24, 180, 181, 289, 292	19, 117, 119, 188, 189
Scout units.....	23	19
Obstacles.....	210, 238	138, 221
Offensive operation. ( <i>See</i> Attack.)		
Operation order.....	111, 124, 192, 308, App III	69, 77, 130, 197, 254
Organization:		
Combat: ( <i>See</i> type of unit.)		
Platoon:		
Armored cavalry.....	75-79	49-51
Communication.....	242	163
Maintenance.....	244	164
Scout.....	12-15	11
Support.....	243	164
Section:		
Personnel.....	243	164
Scout.....	77	49
Scout, combat command.....	64-66	45
Tank.....	78	51
Squad:		
Armored rifle.....	79	51
Support.....	80	51
Squadron:		
Armored division.....	236-246	160-165
Infantry division.....	247, 248	165
Task. ( <i>See</i> Task organization.)		
Troop:		
Armored cavalry.....	141	89
Headquarters.....	142	89
Headquarters and headquarters:		
Armored division.....	237-248	161-165
Infantry division.....	259-262	171, 172
Patrolling:		
Armored rifle squads.....	89, 214	53, 143
Scout units.....	21, 214	14, 143
Perimeter defense.....	213, 340	142, 214
Pioneering:		
Armored rifle squad.....	89, 210	53, 138
Scout units.....	29, 210	24, 138
Plan:		
Attack:		
Armored cavalry platoon.....	107	66
Scout platoon.....	43	34
Squadron.....	303	196
Troop.....	188	128



	Paragraphs	Page
Plan—Continued		
Checklist.....	App II	247
Fire support.....	188, 330	128, 209
Surveillance.....	331	209
Platoon:		
Aerial surveillance.....	91, 249, 267, 269, 314, 320, 325, 343	54, 167, 178, 179, 200, 205, 207, 219
Armored cavalry:		
Advance guard.....	99	62
Area reconnaissance.....	94	58
Attack.....	104-119	66-72
Defense.....	120-127	73-79
Delaying action.....	128-138	81-87
Duties of key personnel.....	81-85	51, 52
Flank guard.....	100	63
Missions.....	74	49
Organization.....	75-79	49-51
Rear area security force.....	103	65
Rear guard.....	101	63
Reconnaissance by fire.....	95	61
Reconnaissance behind enemy lines.....	96	61
Reconnaissance missions.....	91-97	54-62
Reserve in delaying action.....	136	87
Route reconnaissance.....	92	52
Screening force.....	102	65
Security missions.....	98-103	62-65
Zone reconnaissance.....	93	58
Communication.....	383, 385	238, 239
Defense.....	45, 120	36, 73
Delaying action.....	51, 128	41, 81
Maintenance.....	244	164
Scout:		
Action on contact.....	34	26
Action at an obstacle.....	34	26
Advance guard.....	38	30
Airmobile operations.....	59	43
Area reconnaissance.....	36	29
Attack.....	42-44	34-36
Combat operations.....	20-29	14-24
Communication.....	27	23
Contact parties.....	56	42
Damage control.....	60	44
Defense.....	45-49	36-40
Delaying action.....	51, 52	41
Duties of personnel.....	16-19	13
Firepower.....	26	22
Flank guard.....	39	32
Formations.....	21	14
Ground radar section.....	14	11
Guides.....	57	43

	Paragraphs	Page
Platoon—Continued		
Scout—Continued		
Headquarters.....	13	11
Information collecting.....	28	24
Liaison.....	54	42
Listening posts.....	25	22
Missions.....	11	10
Monitoring and survey.....	61	44
Movement by bounds.....	22	16
Movement to contact.....	21	14
Observation.....	23, 24	19
Organization.....	12-15	11
Patrolling.....	21	14
Pioneering.....	29	24
Quartering parties.....	55	42
Rear guard.....	40	32
Reconnaissance missions.....	33-36	26-29
Reporting procedures.....	28	24
Retrograde operations.....	50-52	40, 41
Route reconnaissance.....	34	26
Screening force.....	41	32
Section.....	15	11
Security missions.....	37-41	30-32
Zone reconnaissance.....	35	29
Support, squadron.....	243	164
Position defense. ( <i>See</i> Defense.)		
Protecting an installation.....	214, 294	143, 191
Pursuit.....	315, 317	200, 201
Quartering parties, scout units.....	55	42
Radar:		
Medium range.....	14, 30-32, 265, 267, 269, 324	11, 25, 175, 178, 179, 207
Short range.....	153-155, 181, 267, 269, 324	93, 119, 178, 179, 207
Radio nets.....	383	238
Rear area security:		
Armored cavalry platoon.....	103	65
Squadron.....	291-294, 323	189, 191, 207
Troop.....	183	120
Rear guard:		
Armored cavalry platoon.....	101	63
Scout platoon.....	40	32
Squadron.....	285, 286	187
Troop.....	175-177	113, 114
Reconnaissance:		
Area:		
Armored cavalry platoon.....	94	58
Scout platoon.....	36	29

	Paragraphs	Page
Reconnaissance—Continued		
Area—Continued		
Squadron .....	271	180
Troop .....	166	102
Behind enemy lines .....	96, 370—	61, 231—
	375	233
Checklist .....	App II, 8	252
Fire .....	95	61
Frontages .....	162, 267,	98, 178,
	272	180
Missions:		
Armored cavalry platoon .....	91-97	54-62
Scout platoon .....	33-36	26-29
Scout section .....	69	47
Squadron .....	234	159
Troop .....	140	88
Route:		
Armored cavalry platoon .....	92	54
Scout platoon .....	34	26
Squadron .....	269	179
Troop .....	164	99
Troop. (See Troop.)		
Zone:		
Armored cavalry platoon .....	93	58
Scout platoon .....	35	29
Squadron .....	270	179
Troop .....	165	102
References .....	App I	244
Reporting procedures .....	28, 61, 92,	24, 44, 54,
	277	181
Reserve:		
Armored cavalry platoon, delaying action .....	136	87
Scout platoon, delaying action .....	52	41
Squadron:		
Attack .....	301	196
Position defense .....	339	213
Delaying action .....	350	222
Troop:		
Delaying action .....	218, 224	148, 151
Position defense .....	212	140
Retirement:		
Squadron .....	360	226
Troop .....	230, 231	158
Retrograde operations. (See Type of operation.)		
Roadblocks .....	44, 49, 126	36-40, 77
Route reconnaissance:		
Armored cavalry platoon .....	92	54
Scout platoon .....	34	26
Squadron .....	269	179
Troop .....	164	99
Scout platoon. (See Platoon.)		
Scout section .....	15, 62-72,	11, 45-48,
	77, 87, 92	49, 52, 54

	Paragraphs	Page
Screening force:		
Armored cavalry platoon.....	102	65
Scout platoon.....	41	32
Squadron.....	289, 290	188, 189
Troop.....	180-182	117-120
Section. (See Type of section.)		
Security operations:		
Advance guard:		
Armored cavalry platoon.....	99	62
Scout platoon.....	38	30
Squadron.....	281, 282	184
Troop.....	168-170	106-108
Covering force:		
Squadron.....	287, 288, 320, 337	187, 205, 212
Troop.....	178, 179	116
Flank guard:		
Armored cavalry platoon.....	100	63
Scout platoon.....	39	32
Squadron.....	283, 284, 321	185, 186, 206
Troop.....	171-174	108-113
Rear area security:		
Armored cavalry platoon.....	103	65
Squadron.....	291-294, 323	189-191, 207
Troop.....	183	120
Rear guard:		
Armored cavalry platoon.....	101	63
Scout platoon.....	40	32
Squadron.....	285, 286	187
Troop.....	175-177	113, 114
Screening force:		
Armored cavalry platoon.....	102	65
Scout platoon.....	41	32
Squadron.....	289, 290	188, 189
Troop.....	180-182	117-120
Squad:		
Scout.....	66	45
Rifle.....	79, 89	51, 53
Support.....	80, 90, 123	51, 53, 74
Squadron:		
Administration.....	235	160
Advance guard.....	281, 282	184
Area reconnaissance.....	271	180
Combat support.....	253-258	169-171
Command, control, and coordination.....	264	174
Command post.....	261	171
Communication platoon.....	242	163
Conduct of reconnaissance operations.....	273-277	180, 181
Covering force.....	287, 288, 320, 337	187, 205, 212

	Paragraphs	Page
Squadron—Continued		
Defensive operations.....	318-340	204-214
Delaying action.....	344-355	219-224
Employment.....	249-265	157-175
Exploitation.....	315, 316	200, 201
Filling a gap.....	322	206
Flank guard.....	283, 284,	185, 186,
	321	206
Formation for reconnaissance.....	272	180
Frontage for security operations.....	279	183
Headquarters.....	238	161
Logistics.....	235	160
Maintenance platoon.....	244	164
Medical section.....	246	165
Missions.....	234	159
Mobile defense.....	232-235	159, 160
Offensive operations.....	295-317	192-201
Organization:		
Armored division.....	236-246	160-165
Infantry division.....	247, 248	165
Organization for combat.....	251, 252	168, 169
Perimeter defense.....	340	214
Personnel section.....	245	165
Position defense.....	336-339	212, 213
Pursuit.....	315, 317	200, 201
Rear area security.....	291-294,	189-191,
	323	207
Rear guard.....	285, 286	187
Reconnaissance frontages.....	267	178
Reconnaissance operations.....	266-277	176-181
Retirement.....	360	226
Retrograde operations.....	341-360	218-226
Route reconnaissance.....	269	179
Screening force.....	289, 290	188, 189
Security operations.....	278-294	183-191
Support platoon.....	243	164
Surveillance plan.....	331	209
Trains.....	263	174
Withdrawal from action.....	356-359	225
Zone reconnaissance.....	270	179
Striking force. ( <i>See</i> Defense, mobile.)		
Successive bounds.....	22	16
Support. ( <i>See</i> Type of support.)		
Surveillance. ( <i>See</i> Aerial surveillance platoon.)		
Tank section.....	78, 82, 88,	51, 53,
	241	163
Tank and infantry support.....	255	169
Target acquisition.....	23, 249	19, 167
Task organization:		
Squadron.....	251, 252	168, 169
Troop.....	157	94

	Paragraphs	Page
<b>Trains:</b>		
Squadron.....	263	174
Troop.....	159	96
<b>Troop:</b>		
<b>Armored cavalry:</b>		
Advance guard.....	168-170	106-108
Area reconnaissance.....	166	102
Attack.....	184-204	124-134
Command, control, and liaison.....	160	97
Covering force.....	178, 179	116
Defensive operations.....	205-214	135-143
Delaying action.....	215-225	146-152
Employment.....	151, 152	92
Flank guard.....	171-174	108-113
<b>Headquarters:</b>		
Duties of personnel.....	144-150	91, 92
Employment.....	159	96
Organization for combat.....	159	96
Organization.....	142	89
Missions.....	140	88
Offensive operations.....	184-204	124-134
Organization for combat.....	156-160	94-97
Organization.....	141	89
<b>Part of a larger force:</b>		
Attack.....	203	134
Covering force.....	179	116
Perimeter defense.....	213	142
Rear area security force.....	183	120
Rear guard.....	175-177	113, 114
Reconnaissance operations.....	161-166	98-102
Retirement.....	230, 231	158
Retrograde operations.....	215-231	146-158
Route reconnaissance.....	164	99
Screening force.....	180-182	117-120
Security operations.....	167-183	116-120
Task organization.....	157	94
Trains.....	159	96
Withdrawal from action.....	226-229	153-156
Zone reconnaissance.....	165	102
<b>Headquarters and headquarters</b> .....	237-248, 259-262	161-165, 171, 172
<b>Wire communication</b> .....	381, 384	238, 239
<b>Withdrawal:</b>		
<b>Delaying action:</b>		
Armored cavalry platoon.....	135	85
Scout platoon.....	51	41
Squadron.....	354, 358, 359	223, 225
Troop.....	222	151
<b>Routes</b> .....	349	221
<b>Withdrawal from action:</b>		
Squadron.....	356-359	225
Troop.....	226-229	153-156

	Paragraphs	Page
Zone reconnaissance:		
Armored cavalry platoon-----	93	58
Scout platoon-----	35	29
Squadron-----	270	179
Troop-----	165	102

[AG 353 (12 Feb 60)]

By Order of *Wilber M. Brucker*, Secretary of the Army:

L. L. LEMNITZER,  
General, United States Army,  
Chief of Staff.

Official:

R. V. LEE,  
Major General, United States Army,  
The Adjutant General.

#### Distribution

##### Active Army:

DCSOPS (20)	USMA (25)
DSCLOG (20)	USAWC (10)
ACSI (20)	Br Svc Sch (10)
DCSPER (20)	PMST Sr Div Units (2)
ACSRC (20)	PMST Gr Div Units (2)
CNGB (1)	Units org under fol TOE:
Tech Stf, DA (2)	6-301 (2) 17-22 (2)
Tech Stf Bd (2)	6-315 (5) 17-25 (5)
Chaplain Bd (2)	6-316 (2) 17-26 (2)
TAG (2)	6-317 (2) 17-27 (2)
MP Bd (2)	6-325 (5) 17-32 (2)
USCONARC (25)	6-326 (2) 17-35 (5)
OS Maj Comd (20)	6-327 (2) 17-45 (5)
OS Base Comd (2)	7-11 (5) 17-46 (2)
Log Comd (2)	7-25 (5) 17-51 (5)
MDW (2)	7-27 (2) 17-55 (5)
Armies (25) except	9-65 (5) 17-57 (2)
First US Army (27)	9-66 (2) 17-65 (5)
Corps (10)	9-67 (2) 17-66 (2)
Div (10)	10-45 (5) 17-67 (2)
Ft Belvoir (5)	10-47 (2) 17-85 (2)
USATC (10)	10-48 (2) 17-86 (2)
Trans Terminal Comd (10)	11-57 (2) 17-87 (2)

NG: State AG (3); units—same as Active Army except allowance is two copies to each unit.

USAR: Same as Active Army.

For explanation of abbreviations used, see AR 320-50.

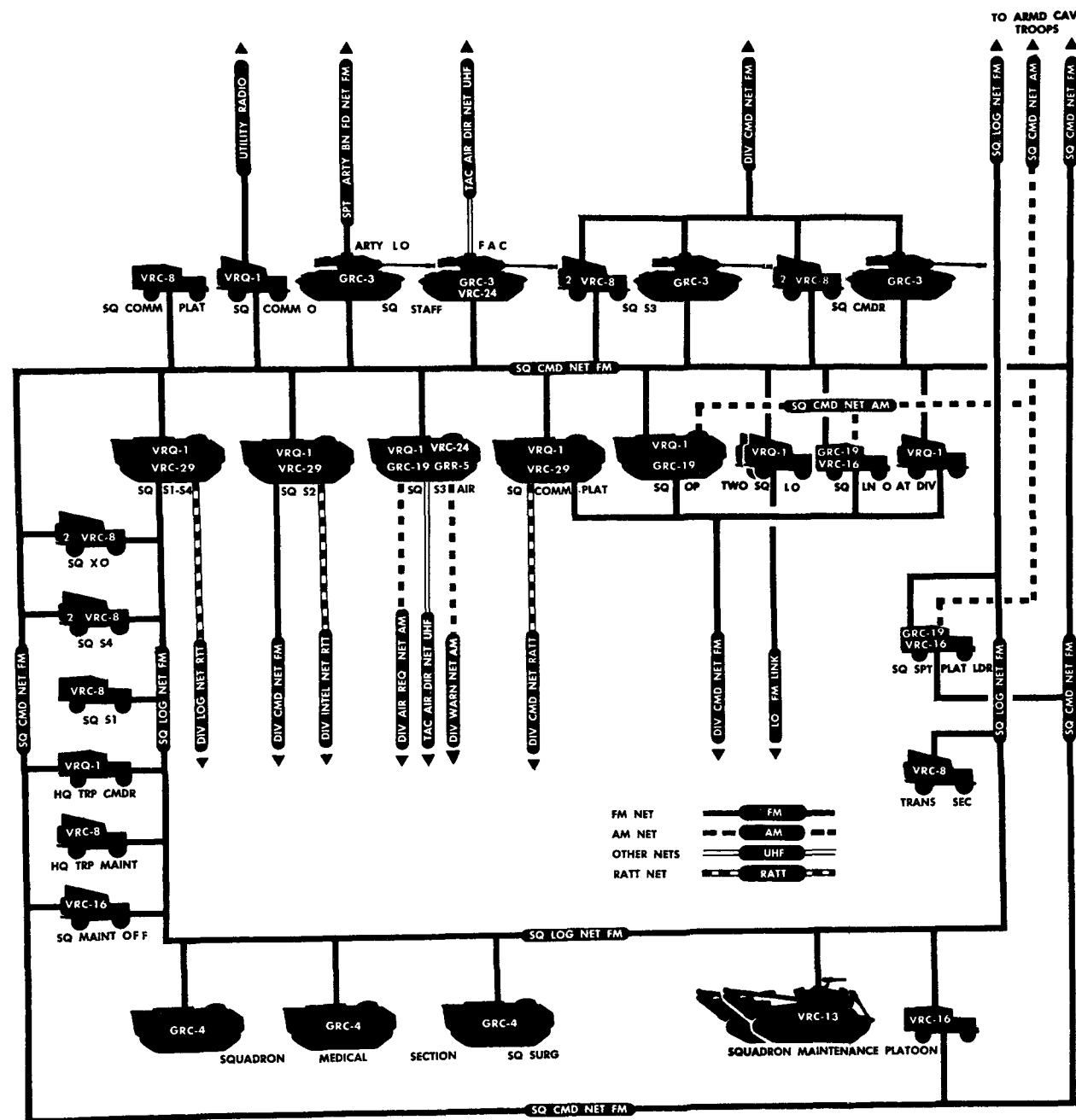


Figure 60. Type radio net diagram, headquarters and headquarters troop, armored division cavalry squadron.

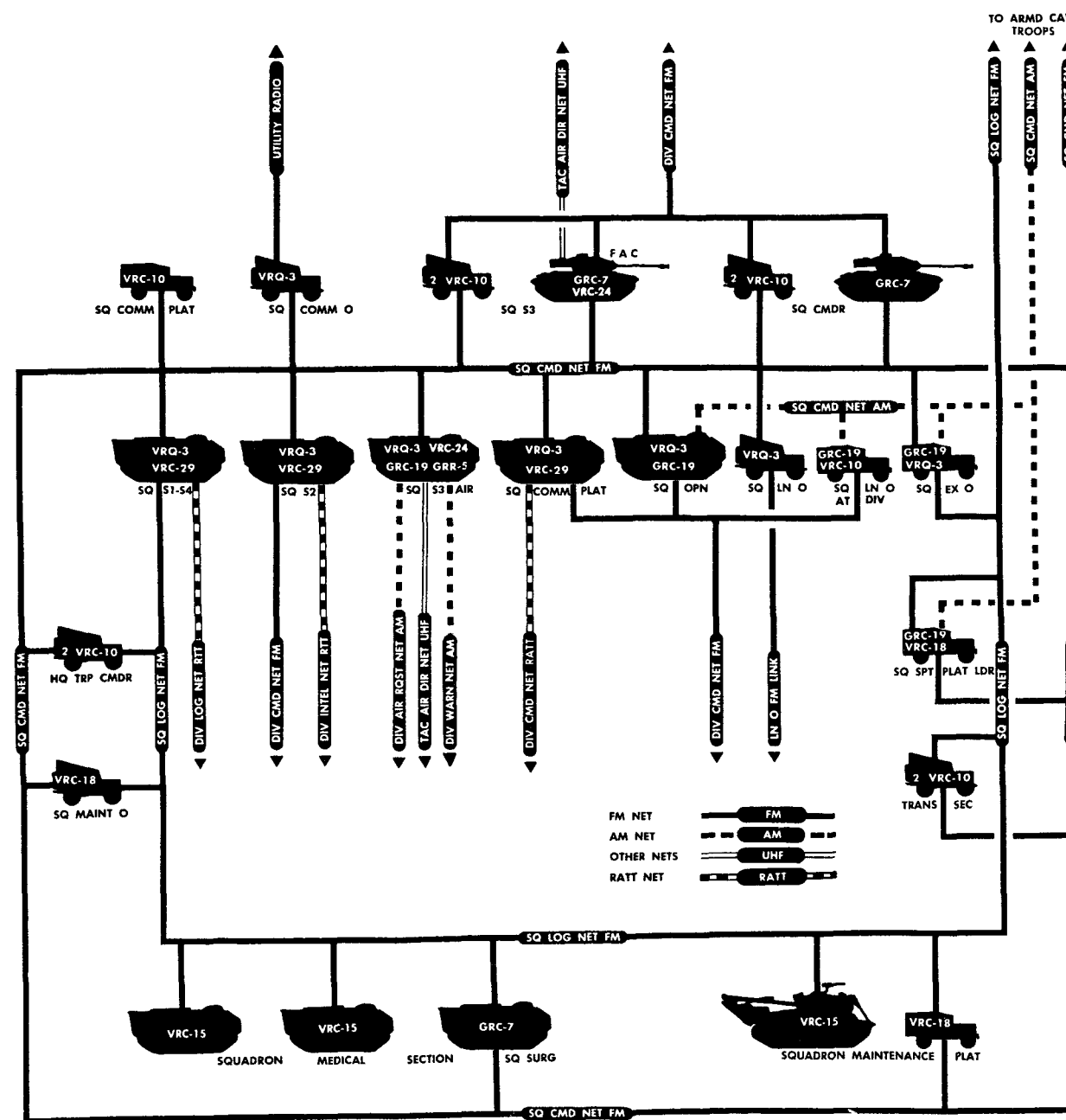


Figure 61. Type radio net diagram, headquarters and headquarters troop, infantry division cavalry squadron.